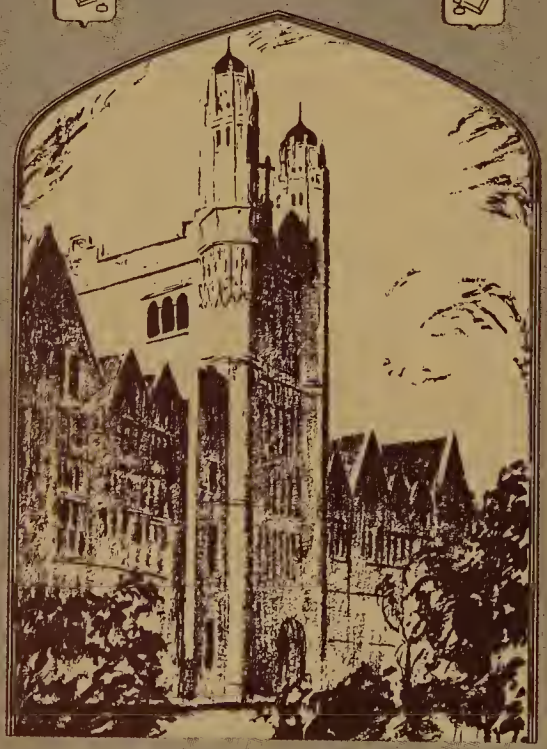
VAUBAN

BUILDER OF FORTRESSES



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BY

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CHAPTER ONE: ANCESTRY AND FIRST STEPS (1)

NO man has left a greater mark upon the features of his country. Vauban fortified every frontier town in France, and girt them round so securely that they remain enclosed within the limits which he imposed upon them, and the bustling traffic to-day is checked for a moment in order to pass through his narrow gates. He fortified the Pyrenees and the Alps; Catalonia and Dauphiné are impressed with his seal; his plans completed the Canal des Deux Mers. His works have survived the passage of two centuries. His bastions overlook the plains of Flanders; they are reflected in the waters of the Mediterranean.

No man touched more closely the heart of his country. He himself was touched by it, loved it, and sought for it. Like a devoted physician he listened for its beating, and seeking it thus he discovered the way to win its love. Ask any schoolboy to write down the names of the ten men who served France best in the old days, and among these ten names he will write the name of Vauban. When Napoleon in 1808 had the heart of Vauban removed from the church of Bazoches in Morvan (2) and placed in the Invalides, he expressed the homage of France.

What do we know of this man whose name is so

familiar? What was his manner, the tone of his voice? On these points we are ignorant. Vauban is a symbol, not a personality. Through that period of which we know so much, which has been chronicled with such insight, Vauban passes and we scarcely see him. Madame de Sevigné does not appear to have known him. The Court was her centre of interest, and Vauban was not there. If he went to Versailles it was on urgent business, and his stay was short. There he was just as much out of his element as Jean Bart, slipping in his nailed shoes on the floor of the *Galerie des Glaces*. As the sailor smacked of the sea, Vauban the builder smacked of mortar and earth. He was always at a distance, among the snows or the mud; if he was not fighting, he was building, travelling, or drawing plans. Vauban, devoted to his work, has disappeared in his work. And this work itself remains unrevealed to us. Versailles, visible in its entirety, is for ever a splendid spectacle. We visit and admire Versailles. But are we aware that Louis XIV built a structure more magnificent still, as well thought out, more powerful, almost as beautiful? This amazing structure, concealed from our eyes by its very immensity, is the frontier of old France, that skilful and dexterous network of strong points, of plains capable of being flooded, of batteries, of canals; that breastplate of stone, waters, earth and crossed fires which encircled France and still encircles her. We can never see it except in its details; the slope of a glacis, the

escutcheon over a gate. Very often these details are in our way, and we destroy them ; some bastion is demolished or some gate falls. But in spite of all the work still stands, superior to our attacks.

The written works of Vauban are as widely spread and as generally unknown. It will always be so. In the archives of the War Office and the Corps of Engineers, in the *Archives Nationales*, in the manuscript department of the National Library, his papers fill many a portfolio. Their mass of technicalities condemns them to oblivion. From the depths of Catalonia Vauban directs the builders engaged upon a bastion in Flanders, telling them what wood to use for the pile-work of their foundations ; from a remote corner of Brittany he issues directions to those employed in fortifying a road in Savoy, laying down the particular sand to be used in mixing their mortar. Such was his meticulous care, his daily scattering from the store of his infinite experience. What is given thus is given without reward. The national edition of his writings, a pet project of former days, has never been more than a dream, and this dream we no longer indulge in. The greatness of the service surpasses the possibilities of our gratitude. Has Vauban a monument anywhere ? Apart from his tomb at the Invalides and his bust in Morvan, I know of none. It matters not. Vauban has earned the reward that he would most have desired, the gratitude and remembrance of his own people.

Our country-people apply the name of "Sully" to the elms which the landowning Chancellor planted by the roadside. When our remote descendants, on the plains of Alsace or among the Pyrenees, come across those traces, weather-worn yet still magnificent and proud, which were once the work of Vauban, they will recognize them and repeat that name, sonorous, simple, and completely French, which is for ever linked with them.

Vauban's great-grandfather, Emery Le Prestre, was a notary in a town of Morvan ; his brother was a shopkeeper of Saint Saulge, and his wife the daughter of a merchant of Corbigny. They were all quite humble folk. In 1555 Emery Le Prestre bought the little fief of Champignolles and the house of Vauban in the parish of Bazoches ; this fief was under the suzerainty of the Count of Chastellux. In this manner the country lawyer joined the ranks of the nobility. He assumed the title of Esquire, and, according to the local custom, lived as a country gentleman among the other country gentlemen, certainly quite a simple and rustic existence. In 1595 the King called up the *Arrière-Ban*; (3) Jacques Le Prestre, lawyer, lord of Champignolles and Vauban, the son of Emery, responded to the call and, mounted in the company of his neighbours, went to offer his services to François de Bourbon. Very soon disbanded, he returned to his lands, for which in 1617 he paid homage to the Count of

Nevers. This formality does not prove that his fortunes were in a very flourishing condition. "We are in great trouble and want," he wrote in 1618 to a kinswoman, "if you could aid us to the best of your ability, we should be beholden to you." And his kinswoman provided him, through a shopkeeper of Nevers, with eight ells of serge, some buttons, and an ounce and a half of silk.

Jacques Le Prestre had eight children, of whom the third, Urbain, lord of Vauban, married Edmée Corvignolle, a local girl, the daughter of a shopkeeper, who brought him as her dowry a house at Saint Leger-de-Foucheret, a very modest dwelling such as a peasant would live in nowadays. Some of its walls still remain. The possession of a stone-built house was in itself almost an emblem of nobility in ancient Morvan, where people still dwelt in huts made of mud mixed with straw and covered with thatch.

Urbain Le Prestre, an upright and kindly man, according to tradition, lived there in order to look after his estate. On a day which cannot be exactly determined, a boy was born there, who, on May 4th, 1633, was taken to the side chapel of the parish church and given the name of Sebastian, which was the name of his godfather, M. Clairin, parish priest of Courdois. On the same day the child was christened. An inscription on the wall commemorates the ceremony. The register has been preserved, signed by the father and godfather ;

the mother, not being able to write, scrawled a confused flourish.

"Vauban," wrote Saint-Simon later, "was a typical country squire of Burgundy," and again, with regard to his ancestry, "nothing could be shorter, newer, duller, of less importance."

That may be; but even Saint-Simon, with his rigidly feudal outlook, might have discovered, had he taken the trouble, a curious feature in the "nobility" of Vauban. It was completely feudal in character. It owed nothing to the king's treasurer or to the King himself. The family of Le Prestre were country people, who prospered in their own country. By acquisition, by consent of the lords of Chastellux and Nevers, they entered the ranks of the upper classes: an ancient custom which fell into disuse before the birth of Vauban. Emery bought his title of nobility in 1555; in 1579 a royal prescription forbade these local elevations and ordained that no one should rise to nobility without the authorization of the King, which meant without a receipt from the treasury. The nobility of Vauban might be short and new, but for all that it had solid landed worth.

Many stories are told of the childhood of Vauban, of the poverty of his people, of the lessons in mathematics received from the village priest in return for looking after his horse, even of his meeting in the woods with an officer who had lost his way and

whom he directed and led to his destination, with the result that the officer, struck by the intelligence of the child, offered to carry him to the war. These stories are legendary and recent. The only certain fact is that Sebastian Le Prestre Vauban had at the age of seventeen never left the village, that his only friends and playmates were the villagers, his only schoolmaster the priest.

About the year 1700 Vauban wrote an "Epitome" of his service. We may quote and comment upon its first words.

"He began his service in the year 1651, at the age of seventeen. He is happy enough to have been able to continue it from that time until now without a break, and without there having been any year, either in peace or war, that he was not usefully employed summer and winter.

"At the beginning of the said year 1651, he entered the service in the capacity of a cadet in the regiment of Condé, (4) d'Arcenay company, having a fair smattering of mathematics and fortification, and being at the same time a passable draughtsman."

His career was henceforth attached to the soil, as his descent and his childhood had been. Condé, the victor of Rocroy, a great leader and a prince of the blood, came to Burgundy, where he had allies and dependents. Mazarin had kept him a prisoner for thirteen months in the royal castles. Freed at last, and breathing vengeance, he went as a feudal rebel to find refuge and support in the districts

which owed him allegiance. The country nobility loathed Mazarin, an Italian prelate, the minister and favourite of an Italian queen. They welcomed warmly this discontented prince and rallied round him, and the young men offered themselves for service under his banner ; among them Sebastian Le Prestre Vauban. He was seventeen, and probably careless of political matters. But he was spirited and tired of village life. He wished to enter the service, and he trusted Condé. Condé interviewed him, found him alert and capable, and took him with him into the Ardennes, the rallying ground of his forces.

Evidently young Vauban showed marked aptitude as a builder. Condé sent him, as his first task, to work on the fortifications of Clermont-en-Argonne. There he immediately gave signs of his martial temperament. Stories, this time authentic, told by Vauban himself, throw a light on this first campaign. While Condé was besieging St. Menehould, the young engineer swam across the Aisne under musketry fire to lead an attack against an undefended spot and so assisted in the capture of the place. Condé from the banks of the stream viewed this exploit, which, as Vauban writes in his "Epitome," gained him great honour and secured him many attentions from his officers. It was even proposed that he should be made an ensign in the regiment of Condé. He refused the offer "as he was not in a condition to support the rank," i.e. on account of his poverty. Life was expensive in the

crack corps, and Vauban was compelled to seek a more obscure service.

Vauban, who had nothing of the rebel or malcontent in his nature, found himself out of place in the confusion of the civil war. By good luck he soon extricated himself from it. In 1653, one day when he was riding abroad with some of his comrades, a party of Royal horse appeared and fell upon the troop. Vauban contrived to escape, and by skilful movements "found means," as he writes, "to draw the party into a sunken road where his opponents were obliged to pursue him in single file, and having turned round upon them and caused them to halt, he kept his aim upon the leader of the party and made his conditions of surrender, which were that he was not to be plundered or maltreated and that he was not to be compelled to march on foot, which terms were faithfully observed."

Vauban had become known to both armies by his exploit at St. Menehould ; his adroit and plucky surrender brought him further fame. Mazarin expressed a wish to see this intrepid young man ; he spoke to him tactfully, and probably had no great difficulty in converting him to the Royal cause. As a penance, he sent him before St. Menehould where Condé was entrenched, so that he found himself once more on the same spot in another cause. In 1655, at the age of twenty-two, Vauban received his commission as Engineer in Ordinary to the King. From that moment he served and

fought unceasingly ; at Valenciennes he was severely wounded, but remained in action carried in a litter ; at Montmédy, three engineers having been killed during the first week, Vauban remained alone, and in spite of being hit four times, he directed the works for forty days. His branch of the service was a dangerous one, and many young men were killed. " Men who have taken part in five or six sieges are rare among us," wrote Vauban in later years. And, with his extreme modesty, he attributed his success to the luck of his survival.

What was the profession he adopted, and what did the word " engineer," which was to mean so much in the future, convey to a Frenchman of the seventeenth century ? It was the name of a very modest employment necessary to the army. Military commanders had always needed the services of a skilled man, capable of building a catapult, of removing a rock, or throwing a bridge, a man who could invent and handle tools. (5) Archimedes was the engineer of the Syracusan armies ; in order to determine the range of the enemy's positions, he devised the same means that were subsequently employed for determining the distance of the stars. The barons of the Middle Ages did not take the field without their master-artisans, their " artillerists " as they called them. These artillerists invented guns and gunpowder, whence their designation acquired a particular meaning, and

the employment of a new word ; the master-artisan of the armies became henceforth the engineer.

The new word appeared at a time when the horizons of research were widening. The functions of explosives in war was discovered and perfected throughout the sixteenth century. Walls were breached and disappeared, towers fell and were not replaced. In their place rose bastions of angular form, with narrow angles to cover with their field of fire the widest possible space. Instead of building lofty battlements to dominate the assailant, attack him from above and overwhelm him, there sprang up a dexterous method of calculating distances, trajectories and tangents, which left its mark in deep ditches and gradual glacis. Mathematics gained ground and were largely employed. For this new profession a knowledge of all existing practice and science was essential. Not only earth but water was employed as the surest defence of man. But knowledge of water was quite a science in itself. Leonardo da Vinci, in Lombardy, had been an expert in the use of water. Flanders, where Vauban served his military apprenticeship, had also its skilful engineers, builders of canals, dykes and sluices, accurate surveyors and topographers. The times had scarcely changed from Da Vinci to Vauban ; the Renaissance continued his work, and his genius animated the French corps of engineers. The two chiefs who had preceded the Chevalier de Clerville in his appointment, Denoyer and Pagan,(6)

had been eminent men capable of creating a tradition.

Denoyer, the builder and taker of cities, the architect of Fontainebleau and the Louvre, was an open-handed lord who built a church at his own expense and called in Poussin to decorate it. The Count de Pagan was a fine soldier, a born engineer and builder. A bolt deprived him of the sight of one eye at the assault of Montauban. He was present before Montpellier and before La Rochelle, where two journeymen carpenters, Tiriot and Metezeau, advised him in the construction of the famous stockade. At the defile of Suza, it was he who decided the engagement by a turning movement at the head of his troops along the edge of the precipices. As an engineer once more, he carried out twenty successful sieges, and lost his remaining eye. Even though blind, Pagan did not abate his activities. No longer able to take the field, he became a student and explored geometry, mechanics, and the astronomical system of Galileo. Geography became a hobby of his, and he studied the writings of the explorers who enlarged the bounds of the known world.

Such were Vauban's masters and the instigators of his work. At that time there was no training on the threshold of a career; every man experimented, invented and showed what he was worth. The Renaissance still flourished. Its flowers were less splendid, but its fruits were heavier. While Art was producing her last master-

pieces, Science was merely beginning to display hers. For all that the creative energy was the same ; the spirit had not degenerated. And it was this spirit that animated the corps in which Vauban was enrolled.

IN 1655 began the French hegemony ; in 1661 Mazarin died. Louis XIV began to govern, the Renaissance found at last what it had always lacked: a great prince who loved it, and a great people who supported him. Louis XIV achieved that *coup de majesté* that France expected from him. He overcame all opposition and reigned. Happy were the Frenchmen whose lives were beginning ! The most glorious period in the history of the nation was dawning. Happy were catholics, sceptics, poets, savants, builders, and soldiers; and happy was Vauban, at the age of thirty !

Mazarin bequeathed peace to the young King ; but Louis XIV would have it active and magnificent. He chose for his advisers the two men who for ever remained at his side : Louvois (7) and Colbert. He divided between them the burdens of his Government. To the former he entrusted war, to the latter peace ; the frontiers to Louvois, the coasts and provinces to Colbert. He undertook great enterprises, of which one, the wonder of Europe, was to be the crown of peace. Louis XIV determined to unite the Atlantic and the Mediterranean by a canal which should cross the Cevennes. The power of Rome had not attempted so much. The scheme had first been thought of in the time of Leonardo da Vinci and Francis I ; Louis carried it out. In spite of the statements of some of his biographers, Vauban had no share in the original plans of the Canal des Deux Mers. (8) It was not

till later that his advice was sought, but from the first he knew and expressed admiration of "this work, the finest and most noble in the world," whose example inspired and whose difficulties served to train all that first generation of French engineers.

The reign was brilliant, Vauban was young and poor and his work was obscure. We must be content with scanty knowledge of these first years of his life. We know that he married, in 1663, a young girl of his own country, the daughter of a family of long-established nobility, Jeanne D'Osnay. It was a soldier's marriage, and he was hardly ever to see his wife. Very soon he parted from her, to rejoin his beloved earthworks.

Where was he to begin his life career? Would he work in the provinces and harbours under Colbert, or on the frontiers under Louvois? He already seemed torn between the two Ministers. A mere accident decided the matter, and henceforth Louvois became his master. According to the custom of the time, Vauban combined the duties of draughtsman and contractor. This double rôle was not free from inconvenience and led to not infrequent intrigue and suspicion. The engineers in the Royal service were frequently accused of profiting by the works of which they themselves drew up the plans. It happened that this accusation was made against Vauban. A malversion had been committed, and an attempt was made to fix the responsibility for it upon him. A commissioner,

who happened to be related to Colbert, persecuted him relentlessly, and his career might have been ruined had Louvois not intervened in his defence. He protected him, and demanded his services.

Vauban, as unswerving in enmity as in friendship, from that time left the service of Colbert and attached himself to Louvois. By Louvois' orders he began that ceaseless tour of the frontiers which lasted the whole of his life, and which attained an epic grandeur. From Antibes to Dunkirk he journeyed unceasingly, studying the lie of the land, working on every kind of *terrain*, the rocky shores of the Mediterranean, the sand-dunes of the north, the Alpine escarpments, and the inundated tracts of Flanders.

His worth was appreciated in high circles. In 1669 Louis XIV declared war on Spain, and set out to capture the cities of the Spanish Netherlands, taking Vauban with him as his engineer.

Tournai and Douai fell in turn, Lille was taken in nine days. Vauban was the author of these triumphs. He bore the trace of them through life, having been wounded in the face by a musket ball at Douai. The king did not undervalue his services and opened wide the gates of opportunity before him. The aged Clerville, the Director of Fortification, showed the King the plan he had drawn up for the defence of Lille. Louis XIV was not satisfied with it, and asked Vauban for an alternative, which was immediately adopted.

" You may let M. le Chevalier de Clerville speak as he pleases about the things he wishes to do in the fortresses," wrote Louvois to one of his subordinates, " for he speaks very well and enjoys doing so. Let him talk, but never carry out any of the things which he says."

And Vauban wrote : " The Chevalier de Clerville before his departure planted a dozen stakes at random in my presence, merely that he might say that he had drawn the trace of the citadel, but, as a matter of fact, not one of them is of any use."

The young King liked having young men round him, and Vauban, who was thirty-four, was to build the defences of the frontiers.

Every enterprise was carried out with untiring ardour and energy. The King hastened to Franche-Comté, taking Vauban with him. Franche-Comté was conquered. Vauban fell ill and informed Louvois. But when one served the King, sickness must not last. Louvois needed Vauban, and called him to Versailles.

" I beg you to come here as soon as you are free in order that I may consult with you on several points concerning the King's service. *I beg however that you will not unduly hasten your departure, for fear you should fall ill again.*"

The last lines are visible in the original under the erasure. Louvois had crossed them out.

Vauban was ordered to Dunkirk to plan some bastions and a fort. He was to make haste, the English were uneasy at the progress which the King

was making in the Netherlands ; a fortified Dunkirk would give them pause. Accordingly we find him at Dunkirk, a miserable spot, a village of petty traders set in a fold of the dunes, at the mercy of any ten-gun pirate. It was nothing but sand and water. From this sand and water Vauban was to build his most famous work. Great preparations were necessary. Vauban summoned his most trusted subordinates, " all the band of Archimedes," he surveyed the lie of the land and its levels, studied the tides and calculated their rise and fall. His plans were made ; in defence of the land he would employ the sea, catch its waters and spread them at the foot of his glacis. But this was only half his task ; the sea which he had made his ally was still his enemy, it silted up the creek in which the King was determined to moor his fleet.

Vauban devised a scheme for employing the waters of the land to prevent this silting. The flat land of Flanders was a great reservoir ; Vauban proposed to collect and canalize the stagnant waters, then, by suddenly releasing them, to employ their energy to scour the channel and make it available for vessels of deep draught. Vauban drew his plans ; sluices held back the waters, those of the sea which were destined to cover the land, those of the land which were to sweep away the sand. Training-banks on the edge of the channel were to direct the rush of water, a tidal basin should allow of the vessels remaining always afloat, arsenals and magazines built round it should be defended by a plain line of

trenches following the configuration of the ground. The dunes themselves, made even and stable, should furnish the glacis in front of the works ; detached forts thrown out towards the sea should protect the anchorage and take an enemy landing in rear. Two other forts, still farther removed, would delay an investment. It was the first time that Vauban had organized so vast a whole. He lavished his energies upon it and was immensely proud of the result.

" It is the finest and best plan. All that I have done hitherto seems nothing to me compared with this."

And again :

" It is the greatest and finest scheme of fortification in the world."

So fine that he became enthralled in the execution of every detail.

" As I am greatly enamoured of the design of the old bastions and the citadel, I traced them all out myself, and there is nothing that I have not measured at least twice. In fact my assistant has not so much as touched the measuring-tape."

Vauban would have stayed at Dunkirk, (9) but Louvois tore him away. " As soon as possible you will go to Lille," he wrote to him, " then to the places in Hainault, then to Paris by post, to Pignerol and Perpignan in the same way, so that having returned by January 15, you will be able to return to Flanders to supervise the opening of the workshops, and to

put everything in readiness for the coming year, in so far as the King may require." Vauban set out ; he did not mind, for inactivity was unknown to him. But between Roussillon, whither Louvois was sending him, and Flanders it was easy to pass through Morvan ; might he not stop there for a few days, or at least for a few hours ? Louvois had foreseen the temptation and had provided for it. "You understand that you must not dream of setting foot within your own home." So be it, he would not think of it.

The Epitome of his Service for 1669 is a page of simple and convincing eloquence.

"In 1669, he was employed in the execution of the schemes mentioned below, and in accomplishing the work of Tournai ; and in the winter of the same year he went to Pignerol to supervise the scheme for its fortification. Following which he went to Antibes and Toulon, where he planned the new dock and the fortifications of the place, as they were subsequently built.

"From there he went to Roussillon, where he devised the fortifications which have been added since that time at Perpignan, Collioure and Villefranche, and on his return he visited the works of Douai, Arras, Bapaume, Béthune, St. Venant, and all the other parts in Artois of which the schemes had already been set in order by him and approved by the King. Upon which point it should be mentioned that as soon as he had advised a plan for any place and it had received approval, the King en-

trusted him with the superintendence of everything concerning the execution of the work, a duty which forced him to undertake perpetual journeys at all times of the year.

"It was about this time that he devised the fortifications of St. Quentin, La Fère which had to be dismantled, and Ham, Peronne and Doullens which were at that time under the control of M. Colbert."

The reason for this furious activity lay in the secret schemes of the King. In 1668 peace had been torn from him by Europe. The allied arms of Holland, the Empire and England had arrested his progress. He had kept Tournai, Douai and Lille, but Franche-Comté had been taken from him; his glory was tarnished. He returned to Fontainebleau and Versailles and surrounded himself with an orgy of gaiety. The brilliance of his festivities dazzled Europe, without diverting him from his steadfast intentions, and he occupied himself in the raising of a force so strong that none should oppose it. Louvois wrote to Vauban in December, 1670:

"The King has only one idea for the coming year, the perfecting of his fortresses and his infantry."

The keenness of Louvois equalled that of the King; Vauban listened to him and obeyed him joyfully. A hundred and twenty years later France was again to be led by young men, Carnot, Danton and Hoche, and to regain an irresistible might. With what strength of will was that generation imbued and inspired! When Vauban intimated

that one of his engineers spoke of leaving the service, Louvois wrote :

" I consider him too wise to apply for his resignation, for that would be the way to the Bastille, where the King is in the habit of lodging people who make such propositions."

Again, when Vauban found fault with the slowness of some of his contractors, Louvois wrote:

" Make them understand that nothing less than their lives are at stake if I discover that they are answerable to the King in any matter in which they have not given satisfaction."

It is the violent style of Saint-Just. There was no peace for Vauban. He was not yet forty, but already he was the victim of chills and of that cough of which we so often find mention in his letters, and which for thirty years was to shake and weary his body until it killed him. He speaks of it, not complainingly, but to explain a delay.

" Do not be surprised, Monseigneur, at the slowness of my progress. The discomfort of my cold was greatly aggravated by long journeys on horseback. I have almost killed my horse with long marches ; and, as a matter of fact, I have been obliged to dismount more than fifty times owing to the pain in my head and the giddiness caused by my cough. I am now a little better, thanks to God, and as I know the pressing need you have for me to go to Dunkirk, I promise you that I will rather die than lose a moment in reaching there."

This letter is dated from Le Quesnoy, on Septem-

ber 5. On the 8th he was at Douai, from whence came a letter and a report, on the 9th he was at Dunkirk, on the 11th at Bethune, from whence came a second letter and report. At Dunkirk the state of affairs did not please him. Responsibility was badly defined. As a frontier town, Dunkirk was in the charge of Louvois ; as a harbour, that of Colbert. Vauban had drawn the plans, Clerville was carrying them out, and his method of procedure caused annoyance to their author. Was his own pet work to be spoil ?

" In truth, Monseigneur," he wrote to Louvois, " I am ambitious at no man's expense, and it is not my nature to do harm to any person whatsoever ; but I am a Frenchman and as such I cannot help being displeased that the King has allotted two or three millions for the best fortress in his realms, and that everything possible is not being done to make it as perfect as it might be . . . I beg you, Monseigneur, to pardon me this long digression and to excuse a zeal that cannot contain itself when a case of serving the King is concerned, of one's conscience and one's duty to you."

Louvois' answer was short and restrained :

" I make no answer to you on the matter of the harbour of Dunkirk, for we must be content to serve the Master well in the matters he entrusts to us, and not to disturb ourselves over the rest."

This perfect discipline was not natural to Vauban. He put too much of his heart into his work, and had too much enthusiasm to practise resignation suc-

cessfully and confine himself to his own tasks. There is nothing that he does not notice and deal with in his letters. He described all the incidents of the workshops to Louvois, and Louvois listened to him eagerly. Here was an idle navvy, mislaying or stealing his tools ; there a maker of gun-carriages, doing less work than a labourer, costing the King a pistole more a month ; elsewhere a spy on the prowl, contractors profiteering, or bricklayers abandoning their jobs. . . .

" To prevent the desertion of bricklayers, which infuriates me," he writes, " I have taken, subject to your consent, two of M. le Maréchal's guards, most reliable men who will keep their horses always saddled in the citadel, each with an order in his pocket and a riding whip in his hand. In the evening, we shall discover those who are missing, and in the morning they will set out and seek them in the heart of their villages and will drag them by the ears back to work."

Everywhere he had to complain of the ineradicable laziness and knavery of human nature.

" Without doubt, if there were any subtleties in the art of cheating which the devil did not know of, he might learn them here," he writes on the subject of the workshops at Douai. " One might rest assured that no such school exists throughout the rest of the world. We have to be so continually on the watch that we have no time for anything but to be perpetually on our guard against them."

Vauban knew what the devil was ignorant of, and pursued without respite those sharpers who wronged the King.

His observation and his ardour went beyond the confines of the workshops. Vauban would not have laboured so zealously if he had not known towards what end he was working. He was a servant of the King, that is to say of France ; for in the seventeenth century these two words were synonymous. Vauban had for France, for her lands, her cattle, her produce, her people, the same sort of sedulous love which the farmer has for his farm. Land and people were inseparable. Take away the land, and what could the people do ? Take away the people, and of what value was the land ? Fully occupied as he was with his building, Vauban never lost sight of mankind and the justice that mankind deserves. Seeing the people oppressed and badly governed in this newly conquered country where for countless reasons it was necessary to conciliate them, he grew impatient and did not conceal the fact.

" I shall take the liberty of telling you," he wrote from Pignerol in February, 1669, " that the valuation of demolished buildings which has been made here is in no sense reasonable, and this is only too evident, for the owners prefer (rather than submit to the conditions) to demolish these houses themselves and sell the materials here and there at a low price, since even that price they find to be double the valuation figure.

"This calls on you for justice, and I would tell you, with all respect, that you should not allow a whole people to proclaim in the neighbouring States that their goods are seized and only half their value given them as compensation.

"There is here a poor man with eight children, whose only possessions consist of a few plots situated on the avenue between Mont St. Brigitte and the citadel. The parade ground has occupied part of them, the rest have been deprived of their soil, and the little that remains will be removed. In common fairness you should put such things right."

Another grievance went even deeper and concerned the administration of the Kingdom itself. Tax-collectors and revenue officers had been set up among the Flemings recently annexed; in other words three hundred rascals were doing their best to make the King's name hated.

"Yes, Monseigneur," writes Vauban, "I hold the King unfortunate in having no servants sufficiently jealous of his honour to prevent the wrongs which such rascalities do him. . . . I could easily tell you of other things which occur in the same district, which are no more creditable, but I fear a rebuff.[a] . . . I conclude with these matters, for I know well that my ardour will betray me into some foolishness."[b]

There Vauban was wrong; the reply he received was not a rebuff but a request for further details.

[a] September 8, 1671. [b] October 12, 1671.

"As soon as you receive my letter," writes Louvois, "acquaint me, if you please, of these other things which happen in Flanders."

His most humble request is the most characteristic. This is what Vauban asks on behalf of a private soldier guilty of desertion. He requests very humbly that he may be allowed to pardon him.

"He is a poor wretch who has five or six little children dying of hunger, and I pity him."

Pity is a word rarely used in military circles; here it characterizes the man who uses it.

Vauban, active as he was and fortunate in his career, did not lack enemies. They lay in wait for him, and found no difficulty in insinuating calumnies with regard to these immense and costly works. Once already accusations had been made against him; now they were made again. Louvois was told that two of Vauban's engineers, Montguirault and Vollant, had stated falsely in their accounts the dimensions of certain works. Louvois informed Vauban, who replied immediately.

"Receive, if you please, all their complaints, Monseigneur, together with the proofs they offer to give you.

"If more important matters occupy your time too much, appoint some honest man who will probe everything to the bottom and then report to you upon it. Do not fear to degrade Montguirault and Vollant; I am certain that they apprehend

nothing on that score ; but if it should be so, for one who is lost there will be two found.

" As for me, I am no less accused than they, and as being perhaps more guilty, I beg and pray of you, Monseigneur, if you have any friendship for me to listen to all that can be said to you and to investigate it in order to learn the truth, and if I am found to be guilty, then, since I have the honour to be more closely in touch with you than the others and as you honour me with your more intimate confidence, I shall deserve severer punishment. That is to say, if the others deserve the whip, I deserve at least the rope. I pronounce sentence myself, and I desire neither quarter nor mercy. But on the other hand, if my accusers cannot produce proof, or if their proof be false, I claim that the same justice be exercised towards them as they demand towards me. And in that respect, Monseigneur, I take the liberty of telling you that matters are too far advanced to remain where they are, for I am accused by persons whose names I know, who have bruited the most damaging rumours about me, to such an extent that it is essential that I should be cleared with the utmost completeness. In a word, Monseigneur, you must see that by not investigating this matter to the hilt you are not giving me justice, and in not giving me justice you force me to find means of seeking it for myself and to abandon fortification in all its branches for good. Investigate them boldly and strictly and show no mercy, for I can assure you that, knowing

my own scrupulous probity and sincere fidelity, I fear neither the King, nor yourself, nor the whole human race. Fortune decreed that I should be born the poorest gentleman in France ; but, by way of recompense, she gave me an honest heart that cannot even contemplate trickery without horror.

" And thus I remain, Monseigneur, with the deepest respect in the world, your very humble, obedient and obliged servant."

The year 1672 brought to Vauban an unforeseen task. Always prompt to speak, he had suggested that the military engineers should be put in charge of a specially trained body of men ; he believed, and had given expression to his belief, that the engineers should be a separate arm, recruited and organized according to its own requirements. " Write me a memorandum upon it," wrote Louvois, who was interested in the scheme. A memorandum ! Vauban hardly knew what such a thing was. He was a man of the open air, of works and workshops, not of the office. Afterwards the taste for writing came to him ; but that was much later. He protested that he had neither the time nor the ability ; it was not his job. But Louvois did not withdraw his request, and Vauban had to comply with it. He had no lack of ideas : " My material increases rapidly, one idea leads to another. . . ."

The difficulty was to put it into shape, to resolve it into chapter and verse. Vauban shut himself

up in an office, and applied himself to the work. By February several large portfolios were filled, illustrated with thirty drawings, and Vauban began to feel happier. Had he not already acquired a taste for this new work? "It will soon be a book filled with the finest goods that I have in my shop," he wrote to Louvois, "and such that surely you alone could draw from me the like." As fast as he wrote, he invented. "You will see nothing in it that is already known, and almost nothing which has been tried. . . ." His memorandum became a treatise on the conduct of sieges. He bestirred himself, hustled the secretaries who wrote at his dictation. He did not handle a pen himself, this petty labour exasperated his powerful hand. "The gift which God has given me of not being able to write three words without confusion positively prevents me from doing that."

Nevertheless Louvois, exacting to a degree, expressed astonishment at not receiving the inspection reports to which Vauban had accustomed him, and demanded them. Vauban answered his Minister acrimoniously.

"You will, if you please, have the goodness to remember, Monseigneur, that I begged you not to write until the end of February, and that I should require all that time in which to finish my Memorandum. I again take the liberty of repeating it to you, and to add that it will take a week in addition to make up for the delay which your letters have caused me. You must understand, Monseigneur,

that the more you write to me, the more you put me back. If I had less regard for you, I could have composed for you an indifferent Memorandum which would have imperfectly covered the twentieth part of the things which I wish to teach you perfectly, and then have amused myself as others do. But, because I wish to satisfy you with all the best things at my disposal, I must pass my life as a slave and be abused into the bargain. This will serve me as a lesson against undertaking Memoranda in the future, but for this once you will be patient, if you please, for I mean to complete what I have begun, and twenty guns would not drive me from my room until it is finished."

At last it was done. It was high time, for there was work to be done on every hand : artillery trials, mechanism to be tested ; all along the frontier the fortresses were supplied and warned. "I am writing everywhere to rouse people, and I am sure that all will go well," wrote Vauban. What was the occasion for all this haste ? Events were impending. On April 28, 1672, the King left his festivities for the army, and declared war. His letter to Colbert bears the impression of the most extravagant and magnificent pride :

"I esteem it to be more advantageous to my designs and more strikingly glorious to attack at once four fortresses on the Rhine and to direct each one of the four sieges in person. I have chosen for this purpose Rheinberg, Wesel, Rurick, and Orsoy.

. . . I trust that none will complain that I have disappointed public expectations." ([10])

Vauban was at the King's side, and the four places fell.

Vauban was everywhere in demand. He came and went, his duties were unremitting. Flanders was occupied and twenty-two fortresses taken ; it was his business to inspect them, to make them French and render them impregnable. The work was put in hand. Then he was given a new task, to go down into Lorraine, where the frontier was weak and required strengthening. For five years, perhaps more, Vauban had not seen Morvan, his house, his people ; he mentioned this, but was not heeded. The King proceeded to lay siege to Maestricht, and Vauban, called to his side, conducted the operation. "As for my leave," wrote Vauban, "I perceive that I made my application too late."

That was to be seen. For the moment Vauban was at Maestricht, and the King rejoined him. The two worked together very well. A Marshal of France, a Turenne, a Créqui, could not permit themselves to be led by a mere engineer. The royal majesty overcame the difficulty. Louis XIV, very considerate and capable, consulted Vauban, and issued orders accordingly. "The operation," wrote Vauban, "was directed by a single head who received the direct orders of the King, and accounted to nobody but him."

The undertaking was fierce and bloody, but successful. Louis XIV gave a majestic account of it in a few lines :

" The way in which the lines were drawn," he wrote, " prevented the besieged from attempting anything ; for the fortress was approached almost in battle formation, with great parallels long and spacious, so that owing to the parapets the enemy could be attacked with a very strong front. The Governor and the officers who were with him had never seen anything of the kind, although Forjaux had found himself besieged in four or five fortresses, but only where the attack had been by saps so narrow that it was impossible to hold them against the feeblest sortie. The enemy, astonished at seeing us approach him with so many troops and in such a fashion, adopted the plan of attempting nothing since we advanced with so many precautions."

The town capitulated after thirteen days of trench warfare. The King went away, but Vauban remained. Worn out with fatigue as he was, he had to repair the breaches and fortify the works. On August 2, a fortnight after the surrender of the town, Louvois wrote to Vauban :

" The King is beginning to be slightly annoyed at not receiving your plan for the fortification of Maestricht. I tell him repeatedly that you are indisposed, and that when one is ill one is not able to do much work. . . ."

The King could not understand anyone in his

service being ill. At last, on August 10, the plan was received and admired. But was Vauban to get his leave? No, he must go and work hard elsewhere. There was much to do at Brisach; so he must go there. Vauban complained. What about his leave and Morvan? But there was for him neither leave nor Morvan. The only reply of Louvois' was a modification of his orders. The King was about to invade Franche-Comté, and Vauban must hasten to join him. "If I do not meet you soon, I shall certainly go out of my mind . . ." declared Vauban. But his brain was quite sound and Louvois had no uneasiness on that score. The great men of this world are slaves just like the poor. The only ones who have a good time are imbeciles and boors. That "good time" was a state for which Vauban came at length to sigh. "Blessed liberty!" he writes, "which I plainly perceive exists only among the Americans!"

In 1674 the summer campaign was directed against Flanders, and was not carried on as Vauban wished. His advice was to refrain from the offensive, being of the opinion that time would dissolve the ill-assorted coalition of Spaniards, Dutchmen and Germans against the King.

"I believe," he writes, "that the enemy would rather risk a battle than avoid it, since avoiding battle is the surest means of defeating them in detail, or at least of dislocating this great machine

so badly assembled, whose parts have so little cohesion that I do not give it six months before one of them breaks off of itself."

But Condé, the Commander-in-Chief, was eager for battle, and found it at Seneffe on August 11. It was a day glorious—and bloody. The Court, that first evening, cried out in triumph, but Vauban reserved his comment. "It is too early yet to make merry over the event," he wrote to Louvois. "Be on your guard lest the enemy capture Arras, Doullens or some fortress of equal importance, or lay waste Picardy." Such cautious advice annoyed Louvois. "I have seen with the greatest surprise," he wrote, "that at Tournai they have got it into their heads that the enemy was about to attack. . . ."

But for all that Vauban was right. Condé, weakened by his losses, pinned to his defences, postponed the offensive, and the enemy menaced his rear. Vauban was the man to defend the fortresses. "I act," he wrote from Tournai on August 18, 1674, "as though we should be confronted by the enemy in two days, and I can assure you, without boasting, that if they come I shall perish or they will be aware of my presence." The enemy attacked not Tournai, but Oudenarde. Vauban had thrown himself into the place and was in command of the fortress, the defences and the garrison. The King had appointed him a Brigadier for the occasion. It was the first time in his life, as it was to be the last, that he con-

ducted a defence. This solitary experience sufficed to prove his worth ; the enemy, as he had undertaken, became "aware of his presence." He allowed them to approach and draw their lines within musket-shot, then, in a sudden sortie, occupied the works, destroyed them and overwhelmed their occupants. The enemy rallied and dug new trenches. Vauban kept them under observation, then, at a signal from him, the engineer Mesgregny, stationed in Tournai, released the waters long stored in a canal, which inundated the plain, drowning the works and the troops who manned them. Whereupon Condé advanced and Oudenarde was relieved.

But Condé was still disquieted ; Bergues and Dunkirk were threatened. Vauban set out in haste, with the establishment and escort of a captain. "On the way," as he puts it in his Epitome, "he thought to be killed in La Bassée, in an encounter with a patrol who engaged his escort and overcame it, wounded his nephew, broke the arm of his groom who was leading a horse, and took his secretary prisoner." Vauban had been imprudent, and he was reprimanded. "I am compelled to tell you," wrote Louvois, "that the King forbids you, under pain of his displeasure, to expose yourself to such risks."

The campaign of 1675 finished badly ; Turenne died, and his army, not without difficulty, regained the Rhine. A shadow passed across the glory

of the reign. The young men had never heard of defeat, they were thunderstruck, as Madame de Sévigné said.

Turenne, in those warlike times, was the very incarnation of the spirit of war. His sword and his counsel lacking, from whom could advice now be sought? Condé was getting old, men were becoming scarce. There was Vauban, and the King listened to him. For a long time he had appreciated his letters, so varied and so much to the point, and read them with care; they were the letters not of an engineer, but of a patriot always concerned with the welfare of the State. "Our fortresses are too numerous," he said, "and too widely separated. Let us not think so much of acquiring new ones as of consolidating those we have." And in a phrase which recalled Henri IV, he wrote: "It is a good thing to hold on to what one has with both hands."

The difficult moment had arrived; Vauban repeated his warning. The Royal armies, too far extended, had left in their rear several places worth taking. It would be wise to recall the armies and capture those places. One above all tempted him; small though it was, it commanded the Scheldt, whose valley it closed. For a long time he had looked at it with envious eyes.

"Let us take Condé without too much fuss," he had several times suggested. "A fortnight would suffice for the operation, and once taken, you can show a *fait accompli*. There are no more

equitable judges than guns; they go straight to the point and are incorruptible. If you wish me to make an expedition in that direction, you have only to say the word and you shall be punctually obeyed."

In 1675 he repeated: "Take Condé, it is the best blow to strike in the present state of affairs." His letter was insistent, and Louvois smiled at it. "I have accepted your reprimands submissively," he wrote, "but for all that without issuing any orders." Vauban returned to the attack. "If we wish to maintain ourselves in the face of so many enemies, we must think of consolidating our forces. You cannot very well do this except by taking the fortress of Condé, which assures you possession of Bouchain, while between them they facilitate the capture of Valenciennes and Cambrai to such an extent that these would scarce escape. If the King were master of these places he could relieve I know not how many garrisons in the rear and form a quadrilateral in Flanders of which twenty years of war could not deprive him, considering that the mutual support each could give the other, together with the rivers, the country, and the ease of relieving them, would render abortive all the enemy's strategy."

This time Louvois listened. The King desired a plan for the siege works. Vauban supplied it at once, and it was adopted. Vauban demanded rafts and a floating battery for crossing the waters

of the river which encircled Condé. They were built and tested with the greatest secrecy. Under pretext of conveying pleasure boats on the canal at Versailles, Louvois tried the wagons which were to carry the rafts ; one evening during a fête the floating battery asked for by Vauban was launched, dancers and violinists taking the place of guns. The battery delighted Louvois. "I shall add to it an additional perfection," he wrote to Vauban, "in order that a cannon shot penetrating right through it will not sink it. Guess, if you please, how that is managed."

In the spring, this disguise was dropped, the day of fêtes was over. On April 17, Condé was invested ; on the 21st the King arrived, the rafts were launched, the battery, now with its guns in position, bombarded the works, and Condé fell. Bouchain shared its fate, as did the whole of the "quadrilateral" promised by Vauban. The King appointed him *Maréchal de Camp*. This dignity must not be confounded with that of *Maréchal de France*. Vauban was to obtain this later, but not yet.

The campaign still went badly. Philipsbourg fell, Maestricht was in danger, the line of the Rhine was lost. It was a misfortune, and that was Vauban's opinion. Philipsbourg, so close to Alsace, should be in the hands of the King, and the Rhine should some day be the frontier of France. However, Vauban maintained that

it was no good "chasing butterflies" as he put it, when good opportunities of capturing fortresses lay ready to hand. His mind was still set on the Flemish quadrilateral.

"As it would not be proper to allow Philipsbourg and Maestricht to be taken without endeavouring to relieve them or to take some fortresses equally important . . . I should advise for the King's service that you should make preparations to besiege Valenciennes and that His Majesty should return suddenly, but with no more than the establishment of a Marshal of France, for the reasons you know of."

Louvois received this advice in silence, weighed it, and transmitted it to the King. The siege was decided upon, and Louvois prepared for it secretly, a measure rendered necessary by the "suddenness" recommended by Vauban. Even Vauban himself was not informed. Louvois kept him at a distance, sent him into Alsace, Burgundy and Lorraine. What was happening? Knowing nothing, he was astonished and annoyed, and this father of grumblers wrote without restraining his anger.

"It would be a fine pleasure for me to arrive in camp with exhausted horses, capable of no further effort myself, at a time when I should have to begin the terribly weary work of a siege. It is a remarkable thing to see how all the world is aware of your intentions, and that I alone am kept out of the secret, apparently that I may be

made unnecessary and my advice of no account. God be praised, I shall do my duty, but I shall take good care not to take upon myself such labours as I have done in other sieges! And of that I warn you. . . ."

Louvois and the King smiled at the threats of this seeker after work, and continued their labours without any misgivings as to his zeal. Suddenly, in the full rigour of winter, the blow was launched. On March 5 the army invested Valenciennes; the King, Louvois and Vauban met beneath the walls. Louvois had charge of supplies; neither arms, tools, rations, or labour were lacking. Vauban controlled the works and organized the assaults. The King watched over the whole.

Vauban was busy everywhere. He dug his trenches, advanced his parallels, manned their whole length, strengthened his position by inundated areas, prevented the enemy from making sorties and counter-saps. The time for assault having arrived, he propounded an unexpected scheme, to attack in broad daylight. The Marshals de Schomberg, de Luxembourg, de Lorge, d'Humieres and de la Feuillade, Louvois, Monsieur, the King himself, were all opposed to it, it had always hitherto been the custom to attack at night. Voltaire tells how Vauban stuck to his point, "with the confidence of a man convinced of what he says. In his eyes it was the way of avoiding confusion and mistakes, to sur-

prise the enemy and overwhelm him by opposing fresh troops to his wearied detachments. Night, as he said with Comines, has no shame. Daylight and the eye of the master would keep cowards in order, animate the weak and raise the brave above themselves." The King listened to Vauban and finally consented to his plan. On the 17th at dawn, the attack was launched. The counterscarp was occupied immediately, and its defenders put to flight; being pursued, they fled to the gates of the town and thus opened them to the attackers. The population became panic-stricken, and the magistrates caused the white flag to be hoisted. The King believed himself to be dreaming when he saw the civil population seeking mercy at his feet and the garrison made prisoners. The army went nearly mad at this success. The young nobility dreamt of nothing but successful assaults and captured enemies. From Valenciennes the King turned upon Cambrai and proposed to storm the town despite its garrison. Vauban, up to then the most daring of all, now counselled caution.

"One must not presume too much upon one's good luck," he wrote to Louvois, "and to make terms of surrender is surely the quickest means by five or six days, or say ten, and would save the loss of seven or eight hundred men. . . . His Majesty should remember that important operations are impending in the direction of Germany, when it will be necessary to employ every effort and to have the troops in the finest possible

condition. To which I may add that the preservation of a hundred of his subjects is worth far more to him than the loss of a thousand of his enemies."

Then, in his homely fashion, he continued :

"I may add, with the candour which God has given me, that I should not much enjoy finding myself beseiged in a place where, as a reprisal, I should be made a prisoner of war, considering that it is the last situation in the world in which I should care to find myself."

His efforts were wasted. The King insisted upon an immediate assault. "Sire," exclaimed Vauban, "you will there lose some man worth more than all the enemy." At the onset the works were occupied ; but the enemy overwhelmed the assailants with their fire and drove them out. Everything had to be begun afresh. The King turned to Vauban. "I will take your advice another time," he said.

Vauban had advised, led, and ensured the success of the campaign, and the King knew it. In July, 1677, Dunkirk being temporarily threatened, Vauban was about to throw himself into Fort-Louis with five or six hundred men. Louvois stopped him. Vauban was no longer one of those who could be sacrificed in the defence of a fort. "His Majesty," he wrote to him, "has ordered me to tell you that he does not wish you to place yourself in that fort. . . ." Marshal d'Humieres had asked for Vauban for the capture of Saint-Ghislain. "His Majesty," wrote Louvois

to him, " approves of your taking M. de Vauban with you, but he urges strongly upon you the necessity for his safety, and he is not to be allowed to undertake work in the trenches. . . ." D'Humieres had difficulty in assuring Vauban's safety, and in keeping him out of gunshot range.

In 1678 the war continued vigorously. While Créqui engaged the Imperialists on the Rhine, Louis XIV, resting on his four acquisitions, Condé, Bouchain, Valenciennes and Cambrai, established himself in Flanders and advanced victoriously. The enemy gave way, and Antwerp was threatened. England was alarmed, the Dutch and the Germans were weary, Spain was at the end of her resources. The diplomatists, assembled at Nijmwegen made terms of peace. (11)

THE peace of Nijmwegen, the most glorious of the reign, was really the Peace of Vauban. It was the crowning justification of his strategy.

The King surrendered his claim to those distant acquisitions which tended only to his military glory ; Maestricht and Ghent in Flanders, Philipsbourg on the Rhine, Puycerda in Spain. He kept everything which completed his kingdom by rounding it off and securing its approaches, such as Dinant which blocked the valley of the Meuse, and Condé, which blocked the valley of the Scheldt. The gateway of the Oise, a constant danger to the kingdom, was closed by a triple defence, Philippeville and Marienburg as outposts, Avesne and Rocroi as the main defences, finally Guise, with La Fère, Laon and Soissons as bastions to check an advance on Paris. Between the fortresses the plains and valleys were surveyed and put in a state of defence. The plain of Flanders was ready to receive the floods which should protect Artois ; the Lys, the Scarpe, the Sambre and the Saare formed a series of natural ditches which supported the Rhineland, not in the King's possession but friendly to him, adding to his strength and influence. Further south were the Vosges, the glacis of Alsace, and the Rhine ; still further south again, the Jura stood like a cliff above the Swiss cantons, that other Rhineland whose benevolent neutrality has never failed. Then came the Alps, the Mediterranean, the Pyrenees,

the Atlantic, the Channel, the Straits. . . . What magnificent unity within those borders, so well given by nature or so skilfully achieved by art; what a powerful whole was this!

In war time frontiers are formed, in peace time they are consolidated. Louvois persuaded the King to devote the sums spent annually on troops since disbanded to fortification works, and Vauban was put in charge of these works. Let us refer to the *Epitome of his Services*.

"In 1678, Vauban was employed in the inspection of the Flemish fortresses, and later in the carrying out of the scheme for that fine and great port of Dunkirk as it is to-day (for which he had drawn the plans some years previously); he began the work at the same time. That year the King appointed him Inspector-General of the Fortifications of France, which made him responsible for the fortified places of the kingdom. In accordance with this he drew up the important and excellent designs for Menin and Maubeuge, which have since been carried out, and which were followed by that of Longwy, from whence he returned to the Court."

Old Clerville was now dead, and his appointment reverted to Vauban. He hesitated to accept it, fearing, in the words of Fontenelle, "the relations which he would have to maintain with the Minister." A man of action and of the open air, he feared doubtless that he would be shut up in

an office, where he would be condemned to the handling of papers. But Louis XIV was not accustomed to consider the diffidence of his servants. He appointed Vauban, and Vauban accepted the post. He filled it henceforth in his own way, always travelling and inspecting, as near as he could be to his works and his men.

Dunkirk had come into his charge, and he was delighted. He had surveyed the ground and traced the outlines ; Dunkirk was in his eyes his best work, and for long he had bitterly regretted not being in charge of it. Now at last he was in charge of it, and he clung to it. Much was already done, but much remained to do, and that the most difficult part ; the scheme he had long devised for scouring, with a rush of water, the sand bank which obstructed the harbour had still to be carried out. Vauban collected, with the aid of four canals, the waters of the Flemish plain, and dammed them up behind four sluices. He supervised everything, with the carefulness of a general about to launch his columns of assault, he prepared and carried through his operations. By his orders the sluices were opened, and the sand swept away, so that very soon forty-gun ships negotiated at low tide the bar that coasters had formerly crossed with difficulty. (12) There lay the bomb-ships of Duquesne, the frigates of Jean-Bart. England was alarmed, while France applauded this stroke of genius. The King,

Louvois, Seignelay, Colbert, congratulated Vauban on "adding another harbour to France and augmenting the power of the King by sea, as he had already done by land in the direction of so many sieges and the construction of so many fortresses."

Vauban took to the road again and visited the Jura. At Lons le Saulnier he took horse, and in three days was at Lyons, whence he travelled rapidly to Toulon to make a detailed inspection of the arsenal and coast line, with its material and personnel, anxious to make the close acquaintance of that family of engineers and labourers it was his business to lead. He loved those men, so courageous under fire and so amenable to work when properly treated. In order to make himself listened to, he listened himself, and every man, knowing this, could freely approach him.

"It is the custom," he writes, "among the decent men of our trade, to appeal to me in the first place, and to explain to me their difficulties and everything of which they have to complain. As I am not stubborn, I amend my plans and explain my ideas to them."

He frequently found fault and was occasionally angry. But he preferred to forgive. "Every fault should be treated mercifully," he cried. "They must certainly be punished when they are in fault, but not so as to ruin them altogether." Severity was not in his nature. More than once

he advised Louvois against it. "Be careful, harsh measures are a dangerous way of putting a good man right."

He was never tired of exposing the needs of his "little troop," of demanding rewards, better pay, leave. On this point he had experience, he knew the courage necessary to persevere in one's work when one has for long been separated from one's people and one's native air.

"Our work will benefit," he wrote to Louvois, "your generosity will secure us that fillip which will hasten the labour."

The welfare of the labourers concerned him as much as that of the masters or overseers, and it sounds odd to hear this Frenchman of the seventeenth century speak thus of his workmen and their need of rest.

"I notice one thing which wearies them and occasions us little profit, that is work on Sunday, which is a day designed by God Himself for rest. And in fact it is impossible that bodies which have worked hard for six days should not require rest on the seventh and not be glad to have that day for their pleasure, since it is to that end only that they work. This compulsion makes them dissatisfied and visibly impairs their spirits. As for me, I am convinced that if Sunday labour were abolished, as much would be done in six days as is now in seven. . . . Besides, many are unable to attend Mass, or from annoyance or grief will not attend it."

Prompt to defend others, Vauban knew how to defend himself, and complained if he was not listened to.

"I am a good fellow who goes straight forward for the good of the service without worrying about trifles," he wrote to Louvois, in 1679, "but I do not like to be neglected or reckoned at less than my worth; this must be said at once without offence, for I have no mind to it."

He was indeed altogether French in his conception of discipline. He required it to be trusting and happy, and knew how to enforce it thus. His inspections did not satisfy him unless he left his people in a good temper. For instance, the following report.

"This letter, Monseigneur, is to advise you of my return from Antibes and Toulon, for which I have prepared naval and fortification schemes adequate to the importance of these places and of the enemies they have to fear. I have settled a number of things which required my attention, made peace among the staff, and drawn up a plan for the arsenal, with which we are all pleased, inspectors, engineers, naval officers and master carpenters. I trust the King will be so too, and after that it will only rest with His Majesty that this work should be carried out in little time."

From Toulon he was bound for Cette. Although the sea was infested with Algerian corsairs, he wished to make the voyage, and in his hardihood

would have set sail if Louvois had not forbidden him.

"I have obtained the King's orders," he wrote, "to inform you that it is his pleasure that you should go by land, and not to disobey under any circumstances whatever."

Vauban obeyed, but took his revenge in complaints.

"The posts in Languedoc and Provence are so ruined and deprived of horses," he wrote, "that the discomfort of those compelled to use them cannot be imagined. In fact, Monseigneur, it cannot be said that one travels post, one crawls, and frequently takes to one's legs. Personally I am convinced that you are robbed and badly served. I will discover all that I can about the matter, and will not fail to give you my information when I return, for I am heartily weary of it all."

Vauban's grumblings always ended in useful inquiries and work done. Once at Cette, he inspected the harbour. At Perpignan he laid out a citadel, at Port-Vendres a series of bastions. Then, following the coast as far as Collioure, he organized the coast-guard service. This done he left the sea and plunged into the mountains. The Pyrénées were unknown to him, they were new ground to study. He selected his posts and small forts, and on the approved spot founded Mont-Louis, an eagle's nest which commanded the valleys. Roussillon being thus provided for, Vau-

ban, crossing the whole length of France, returned to the works of Dunkirk. He had just been exercising his art in the mountain summits ; he now applied it to the sands and the sea. In front of the harbour a shoal scarcely showed above water ; Vauban contrived to build there on piles a work entirely of his own invention, of which he was very proud. Among many buildings, none was to remain so long famous as this Rixban of Dunkirk. Vauban, wishing to carve a suitable inscription upon it, applied to a latinist of note.

"As the Rixban is an extraordinary work," he wrote, "built more than five hundred fathoms out to sea on a bank of shifting sand, which it was so to speak necessary to stabilize ; as it serves not less for the defence of the citadel than for the protection of the harbour, and as in addition it is situated and built in such a way as to render it practically impregnable, even though the town and citadel should be taken, and finally as it is a type of work which does not appear to me to have been undertaken by the Romans or by any other nation, it seems that it forms a subject for the composition of an appropriate inscription. If you could spare a moment, apply yourself to it at your leisure, and do not fail to send it to me wherever I may be."

The inscription was written (for a long time it could be read on the wave-washed stones) :

QUOD OLIM APUD BATAVOS STRUCTA ARCE BRITTANICA
INICERE OCEANO CLAUSTRUM
CAESAR AUGUSTUS
TERRARUM ORBE PERDOMITO FRUSTRA TENTAVIT
LUDOVICUS MAGNUS
TERRARUM ORBE RECENS PER SE PACATO
ARTE NATURAM SUPERANTE CONFECIT
IN MARITIMI IMPERII PIGNUS ET AUSPICIUM
AETERNAM HANC IN VOLUBILI SOLO SALOQUE MOLEM
SUBJUGATO MARI
PROPUGNANDO PORTUI SUMMOVENDO HOSTI
REX NIL NISI MAGNO NOMINE DIGNUM MEDITANS
IMPOSUIT MDCLXXXI

Dunkirk was now finished, and Vauban only returned there in the course of short visits and inspections. He had taken great pains with the place ; a master artificer as well as a master inventor, he knew that every detail told, and that, in the words of a poet " there are no trifles in accomplishment." This man had fortified the whole of France, and yet the minutest pile claimed his attention, the most insignificant slope received his personal care. A letter dated January 3, 1684, is worthy of preservation. He is writing to Louvois, one may see with what object :

" I forgot to tell you, Monseigneur, that you have arranged for the provision of a mole-catcher at Dunkirk, which is a very good thing ; but the man who has been appointed is a good for nothing, who does not attend to his work and wastes his time poaching. I have seen a certain peasant of Rosendall, a suburb of Dunkirk, much

more skilful than he is, who undertakes to kill the field-mice as well, which do almost as much damage as the moles. I recommend you to avail yourself of his services and to dismiss the other man ; the second-in-command knows where my man lives."

What a document ! Should one smile with astonishment that these men responsible for the care of a kingdom should concern themselves with the choice of a mole-catcher ? Is this rigid centralism to be found fault with ? Or on the contrary should one admire this application which overlooks nothing, this direct acquaintance with things ? France of the seventeenth century was not the prey of a bureaucracy ; she was the estate of a master who had made her, who loved her, and who knew how to surround himself with servants as enthusiastic as himself.

We may refer again to the *Epitome of his Services :*

" The year 1681 began with a visit to the coast of Normandy, where he drew up plans for the defence of St. Malo, Granville, Cherbourg, Dieppe and Boulogne, which were begun, were far advanced, and then were destroyed at the beginning of the last war. He was subsequently in Alsace to inspect the fortifications ; from there he returned to Hainault, came back to Paris from where he was sent to the Ile de Ré, La Rochelle, Brouage and Oléron, returning from whence he crossed

France in order to reach Strasbourg. . . ."

Louis XIV had decided to occupy that town, then an Imperial enclave within French Alsace, and an appearance of force accompanied a pacific operation. Strasbourg opened its gates, and Vauban remained there "for the period necessary to draw up the plans for those great and fair defences which have since been built there."

We begin to perceive, behind these official papers, the personality of the man, his impetuosity, his kindness of heart; the powerful brain which built and invented, and the good nature which achieved the whole. But his more intimate aspects remained hidden. Vauban was not always in his workshops, and what manner of man was he beyond them? What sort of a friend, husband, lover, was he? Of his family life we know nothing. That life was infrequent, no doubt, and it appears that Vauban spent no more than six months in Morvan during the first twenty years of his marriage. But he wrote; what has become of his letters? In 1681 he became a father for the first time; his wife presented him with a daughter who was christened Charlotte. Surely he must have had news of this, have sought news for himself. We must not despair of being able to read this correspondence some day. A provincial record office, always closed, holds and hides obstinately Vauban's family papers. Perhaps we shall know some day what he was like as husband and father.

Now we only have, to enlighten us on the subject, a few scraps and gleanings.

There is, as it happens, a letter which was not addressed to Louvois ; a searcher found it at Lille, in the archives of the *Hospice Comtesse*, where it had been left by a former prioress, Sister Marie-Madeleine, to whom Vauban had sent it.

It is a friendly letter ; prioresses of those days were women of the world. It bears the date of February, 1680. Vauban was in Alsace and crossed "Schlechtat." On that same day the Princess of Bavaria passed on her way to Paris, to be married to the Dauphin. Vauban, in his working clothes, "dressed like a housebreaker," as he writes, was not anxious to be seen. He was interested, for all that, he was a gossip, and, like the people, he wanted to see the future Queen. So he mixed with the crowd which surged round the carriages. It was rash of him, his big face was too well known ; Madame la Maréchale de Rochefort recognized him, saluted him, and pointed him out to the Princess. "There," she exclaimed, loud enough for Vauban to overhear. "That is the man who captures cities."

"That made Madame la Dauphine turn round to see who it was," says Vauban, "and she honoured me with a slight inclination of the head. And as Madame de Rochefort continued to speak of me and I to walk for some time at the side of the carriage door, I had an opportunity of observing her. This is how she appeared to me ; she has

large eyes, lively and wonderfully beautiful ; she is a brunette, with a fine complexion. . . . Her nose is fairly large and very slightly drawn down towards her mouth, which is also a trifle large, with red lips well shaded. Seeing her in profile her face seems rather long and slightly prominent from the eyes to the chin, like Princesse d'Espinoy, whom I consider she resembles. On the whole, all that contributes to making her appear pleasant and of a sprightly disposition. . . . Everywhere people are to be met who repeat to one another the sallies they have heard from her lips. . . . If I am not mistaken, these are qualities in a stranger which will prove acceptable in France. For myself, I am so certain that that she will be fortunate there that I shall burn my almanacks if it should not prove the case. So may God give her a long life of happiness and cause her to give to our children masters who shall be worthy of the blood of Louis the Great."

It is a kindly portrait drawn by a man who understands how to view and appreciate a woman.

So our curiosity is awakened. What were the love affairs of this man, so virile and appreciative ? That is a trait which penetrates far into a man's soul, and explains much of his character. What part did love play in Vauban's life ? His wife stayed in Morvan ; he was never there. Faithfulness is a great virtue, and we moderns, who practise it well or badly, esteem it very highly. In the seventeenth century, it was hardly more

esteemed than it was practised. The manners of the time admitted of great freedom. What use did Vauban make of this freedom? It happens that a secret Will throws a vivid light on this point. This Will is worth quoting in its entirety. The first paragraph deals with another question, but it reveals to us such a scrupulous conscience that it would be wrong to omit it.

"Concerning the confidential disposal of the forty thousand livres which by my will are to be put in the hands of Sieur Friand, my secretary, to be disposed of as follows:

"In the first place, in payment of my debt to the Provost of Fong in Lorraine, near Toul, three thousand livres to cover the repayment of fifteen hundred livres, with interest, which I formerly had of the said Provost during the last winter quarters that I spent in Lorraine, which was a long time, in the year of the peace of the Pyrénées, and this for twenty-five occasions of reward ordered me by the late Monsieur le Maréchal de la Ferté, whose lieutenant I was at the time, which twenty-five had risen to five hundred crowns by the end of the winter quarters, which were paid me by Mousieur Flutteau, then receiver of the Provostry of Fong; but as the order which the said Marshal gave me was merely verbal, and as I had to use my wits in order to get paid, I have scruples on the matter, which I propose to discharge; for which reasons the said Sieur Friand will make a journey to that country

and having found the names and officials of that Provostry, he will discuss with them the interest on the said sum of five hundred crowns, and if they should agree to the sum of a thousand crowns as capital and interest, to be applied in the payment of the most pressing debts of the community, he will pay them as my discharge, taking care that this sum is not diverted to the profit of the said officers.

"There is at Bergues Saint Vinox a young widow, by name Mademoiselle Baltasar, with whom I have had very little intercourse, but who nevertheless claims to have a child by me, as she has sworn to me with many oaths, and as I am not absolutely convinced to the contrary, I have some qualms in the matter, all the more as it is not impossible that such may be the case; for this reason Friand will let her know secretly that he is aware of the circumstances, and will offer her two thousand livres from me for the maintenance of this child, whether it be alive or dead, for I have never seen it.

"There is a Mademoiselle Poussin in Paris, dwelling up till now at . . . with whom I had intercourse sixteen or seventeen years ago, though very infrequently; she claims to have had a son by me, who is alive and on whose account she often importunes me, and, although I have reason for doubt in this case as in others, my conscience makes me desirous of settling her demands once and for all, and to this end I beg M. Friand to

put at her disposal up to two thousand livres as a final payment.

" There is also a Madame de La Motte, daughter, according to her own account, of a Count de Burguoy, who died in Paris some time ago, and wife of a Monsieur de la Motte, an infantry captain, who left the kingdom a short while since ; her mother is still alive ; I had by chance some intercourse with her, by which she claims to have had a child, which she swears to with many oaths ; although I very much doubt the truth of her story, I cannot deny that it might be true, for which reason I beg Friand to agree with her for a similar sum as above, that is to say for two thousand livres.

" There is now a girl in the neighbourhood, by name Mademoiselle Baussant, living in the Rue St. Vincent (my porter knows it) who claims to be enceinte by me ; although this is perhaps not true, on the other hand it may be, and so a settlement must be made with her or her mother so that she may take charge of the child, and for this purpose she should be given up to a thousand crowns, should the child live, which should for greater safety be invested on the child's behalf at the Maison de Ville, and as she is a girl of some birth, this must be effected secretly.

" There is besides a poor Irish lady, by name Madame Districh, who also claims to have had a child by me, to which she swears vehemently ; although I have as much reason to doubt her as

I have the others, I would not risk the salvation of my soul for it ; for that reason I beg Friand to give her also two thousand livres.

"These sums together amount to fourteen thousand livres, to be distributed as set out above. If during the time that ensues before the mothers of these children are sought out, which will not happen until after my death, it should happen that any of these children should have died, I should not be beholden to put any sum at the disposal of their mothers, whom I have paid well enough to have no scruples regarding them.

"He will take care that these children are produced, and if they should be dead, he will employ the sums that I have destined for them in augmenting the legacy of the poor Irish lady, who, being a woman of good birth, far from her country, and abandoned by her husband, is more worthy of compassion than the others.

"He will do his best, if possible, to give them the sums in certificates on the Hotel de Ville, so that the money shall not be squandered.

"He will execute the above as secretly as possible, so as not to betray any one of them.

"This much I confide to my conscience, to the honour and fidelity of Friand, in case of my own death.

"Executed at Paris, the 23rd day of March, 1702.

"Le Prestre Vauban."

"After carrying out the contents of this memo-

randum Friand will take care to burn it, without divulging it to anybody."

Meanwhile the war broke out again. Were Dixmude, Courtrai, Luxembourg to remain in the feeble hands of the Spanish King? No, Louis XIV put his soldiers in motion, and the first among them was "the man who captures cities." Under the orders of Marshal d'Humieres, Vauban laid siege to Courtrai. Louvois had issued instructions to d'Humieres; Vauban's life was precious, and he must be taken care of. But how? Age seemed to increase his ardour, he was lectured in vain, he refused to listen. "I have been unable to prevent M. de Vauban from entering the town," wrote d'Humieres in November, 1683. "We very nearly fell out over it; you know he cannot be controlled at one's pleasure, and if any one deserves a reprimand, it is not I."

Courtrai was soon taken, and Luxembourg was about to fall. Vauban desired to have it; Landau and Sarrelouis marked the end of the defensive line covering Lorraine; further advanced and flanking Trier, the fortress of Mont-Royal stood like a spear-head on the spur of a hill. In order to complete and secure the safety of the whole, Luxembourg was essential. Vauban undertook its capture, and the King decided on the enterprise.

Créqui (13) poured red-hot shot into the town, silenced it with the volume of his fire and placed

his army in position. Vauban joined him. Créqui, as d'Humieres previously, had been warned, "M. de Vauban must be prevented from exposing himself needlessly." But who could keep him in check before Luxembourg? Luxembourg, built on a rock on the cliff, in more than one place hewn out of the rock itself, was reputed to be one of the strongest places in Europe. Vauban would take it, he had pledged his word, he was sure of it; but he must bring an unhampered energy to the task. Trenches were his art, his diversion, he would reconnoitre the place in person as though he were a young engineer. As he was strolling in his working clothes under the enemy's palisade, a Spanish sentry saw him and took aim. Vauban, with the complete coolness he displayed in moments of danger, quietly raised his hand. "Friend! Friend!" he exclaimed, "Do not fire." The Spaniard was deceived and lowered his weapon, while Vauban leisurely surveyed the soil of the glacis to discover the depth at which the rock lay. The King heard the story, and was annoyed. Créqui made excuses. "One of my chief cares is to keep M. de Vauban within bounds, but I cannot lay him by the heels as often as I would like to."

Créqui might scold as he pleased, Vauban went where he liked. He was always contriving and inventing. With sandbags and gabions he built snipers' posts above the trenches. The erection of these posts dominating the enemy defences resulted in a fire which delighted him; he insisted upon

himself observing its effects. Louvois scolded him :

"Take better care of yourself than you have in the past, your present occupation compels you to expose yourself quite enough, without amusing yourself by taking pot-shots during the bombardment."

Luxembourg began to choke at last in the grip in which Vauban held it, and its counter-attacks grew weaker. Vauban redoubled his blows. He spared the town ; to cause suffering to the civil population was neither in accordance with his policy nor to his liking. He destroyed the works with the fire of his mortars, and made untenable the bastions, the redoubts and the demi-lunes. Meanwhile Goulon tunnelled and progressed in the depths of the rock. Who nowadays remembers this man's name ? Goulon, chief of Vauban's miners, and his sappers with him had the same glory in the Royal armies as d'Eblé and his bridging trains in the armies of Napoleon. But who knows of d'Eblé himself now ? (14) These reputations of the second rank disappear in a century. Goulon was a hero at Luxembourg just as d'Eblé was at the Beresina. Chief of an army of labourers chosen and raised by himself, he dug, bored, carried away flake by flake that schist rock on which the city was built, and by the explosion of a single mine brought down twenty fathoms of its ramparts.

The assaulting columns were massed in the

trenches, and Créqui gave the order to attack. But this order was unnecessary and no blood was shed. Luxembourg, overwhelmed, surrendered without awaiting the assault. The Spanish drums, behind their fascines, sounded a humble surrender, and officers, men, the whole Royal army, greeted them with a shout of victory ; Luxembourg was taken, Luxembourg was the King's, Luxembourg was French !

Vauban was exhausted, worn out by what he himself had called "the terribly weary work of a siege." Physical and mental weariness had been his ; marches, sleepless nights, long vigils, the sorrow of losses, the anxieties of attack. "I am so tired and sleepy," he writes, "that I no longer know what I am saying."

For all that he compiled a statement of the services and the losses of his corps and sent it to Louvois. He was never backward in recommending to the Royal notice that body of men, always devoted and unknown, who captured cities under his orders ; his children, he called them, and his little flock ; all young men earning poor pay and with few prospects, yet who served so well. "They deserve so much the more," he wrote in forwarding his statement, "as they have been the chief victims in the army, and that in so deliberate and courageous a manner that they would have allowed themselves to be killed to the last man before one of them would have complained, so great was the emulation among them." These soldier artisans fell in advance of

the troops, pencil, drill, and measuring-rod in hand ; they died in silence and were scarcely heard of. So small a thing was an engineer ! " He was the Ass who carried the grain of others to the mill and had but the bran for his share." To obtain recognition for servants of this kind, something had to be done quickly ; for as soon as there was no further need for their services, they were ranked behind the reſt of the army and generally made of no account.

Vauban laid himself on his camp bed and remained on his back for four days. Then he got up ready, as he declared, to " take up the cudgels once more againſt the ſtrongeſt fortress in Europe, as often as it shall please the King to direct me, and my hopes will cause me to make the greateſt haſte I can."

The firſt task was to rebuild the works that had juſt been deſtroyed. Vauban undertook it without delay. A group of Spanish officers, seeing him drawing his plans and marking out the ramparts, exclaimed, " Have you not done enough ? What are you about now ? " To which Vauban replied, " We labour that Luxembourg may never be taken from us."

The glory and the fruits of the capture were great. Every one knew that Vauban had planned and directed the enterprise, and the Court, the Army, and the Provinces praised him highly. The King granted him three thousand piſtoles as a

reward and at the same time the help that he claimed on behalf of his wounded engineers.

"You are right to esteem M. de Vauban as you do," wrote Boileau to Brossette in May 1684. "He is, in my estimation, one of the men of our generation of the most extraordinary merit, and, to tell you in a word what I think of him, I believe that there is more than one Marshal of France who, when he meets him, blushes at finding himself a Marshal of France."

There was no question of promoting him to so high a rank; his position of engineer, always considered slightly inferior, seemed not to permit of it; but was he not about to be appointed Lieutenant-General of the Armies? The rumour got about and grew until it attained such strength that it was believed to be true in his native county and among his own people. On August 15, 1684, the parish priest of Bazoches, in registering a christening in which Vauban's wife acted as godmother, described her as "Jeanne d'Osnay, the wife of the high and mighty Lord Sebastian Le Prestre, knight, lord of Vauban, Lieutenant-General of the Armies of the King. . . ." Vauban received a large number of congratulatory letters. They were wasted words; the rumour was false, and the rank of Lieutenant-General was found too exalted for the simple Vauban. He experienced a moment of annoyance which he did not hide. On July 5, 1684, he wrote to Louvois from Luxembourg itself.

"I do not know, Monseigneur, how the world

understands it, but I find myself obliged to ask justice of you for a boasting rumour which has got abroad about me since the siege of Luxembourg, the spread of which I cannot check. People write from all sides to congratulate me, as is said, on the graciousness of the King in appointing me Lieutenant-General ; it is even printed in the gazettes of the Netherlands and the *Journal Historique de Werden*. Meanwhile those who know better say nothing. I beg you that I may be either refunded the cost of the eighty to a hundred letters whose postage I have defrayed, or that so many well-meaning people should not be disappointed, by obtaining from the King the confirmation of this appointment. You need have no fear of the consequences, I shall take no advantage of it and the King will be no worse served. The only alteration it will produce is that I shall redouble my efforts, and all that I expect out of it is a little incense from posterity, and that is all. Finally, if you doubt the truth of what I have had the honour of telling you, I will send you all my letters ; not one of which is missing."

Had Europe at last received something more lasting than a truce ? (15) So it was hoped, a peace of twenty years was talked of, and Vauban, abandoning the frontiers for the first time, applied himself to a new undertaking. He went to make in Languedoc the acquaintance of the Canal des Deux Mers, the great work of the reign, the finest en-

gineering feat of the century, in his own words, of which since his youth he had heard without ever having seen. The superintendence of the work fell to him as the successor of the Chevalier de Clerville.

The canal had been open since 1681. The barges, lock by lock, crossed the pass of Naurouze. The great work was finished, but there was still much to be done and Vauban entered into it with avidity. No technical difficulty dismayed him, for he was a master of the art of handling earth and water. But in order to make a study of a canal, it is not enough to be a civil engineer ; one must be capable of understanding the economics of a province, of perceiving its needs, of estimating its products and its trade. Here, too, Vauban was prepared for his task. He had always interested himself in the subject of man's labour. The goodness of his heart inclined him towards it, and the wide range of his mental powers enabled him to grasp it. He realized that the soldier is a servant in the same degree as other men, that the function of a fighting man is to protect the worker, that the two are linked together like brothers. If he fortified a place, he wished to know the resources of the district and its population, and he had the same concern for these people as for the garrison itself. What was France herself as a whole but a vast fortress holding twenty million souls, of whom some toiled whilst others watched ? The mind of Vauban, trained by thirty years of constructive effort,

of journeyings, of inquiries, took in this great conception without difficulty.

Meanwhile the King summoned him to Versailles. Versailles, the greatest lyrical work which man has built out of the elements of nature ; earth and water, trees and stones. Versailles was the pride of the King. Europe heard stories of it, expressed its wonderment, its amazement, and shook its head in doubt. Did it exist, or was it merely legendary ? Louis XIV invited his brother princes, who came and saw the palace, the terraces, the forest, the obedient waters, the marbles and the bronzes. The reality surpassed the rumours. But for all that Versailles was not finished, fresh marvels were being prepared.

Versailles was the monument of victories, of the grandeur of France ; the monument was to become more imposing with every victory. What was the King's new idea, and why did he summon Vauban ? It was a secret, which however was spoken of in whispers. " The King," wrote Madame de Grignan to her mother, " is desirous of leading to Versailles and holding captive there an unknown beauty, fresh, natural and pure, who will outshine all the other beauties. . . ." What was this rustic beauty ? Madame de Grignan was careful not to reveal it too soon and Madame de Sevigné read her letter impatiently. " I assure you that I was inquisitive as to her name and that I expected to see some new beauty arrive

and be introduced to the Court ; I suddenly discovered that it was a river which had been diverted from its course, so precious is it, by an army of forty thousand men. It has taken no fewer than this to prepare its bed." In a word Louis XIV wished to increase the splendour of his waters, and to divert a river through his park. But what river ? The Seine ran close by, but down the slope of some hills, and it was necessary to seek elsewhere. The aged Riquet, who had planned, organized and completed the Canal des Deux Mers, and who seems to have been a sort of Lesseps in the grandeur of his conceptions, proposed to bring in the Loire ; he went to great pains to secure the control of the undertaking.

Louis XIV consented ; but Riquet died, and no one dared take up his scheme. Then it was decided to capture the Eure, ten leagues distant. Again, an engine, situated at Marly, would draw a subsidiary supply from the Seine and raise it as far as the Park. These projects were on an enormous scale. The King, taking a great delight in subduing Nature to his own ends, as a contemporary wrote, adopted both these plans.

The army which had taken Luxembourg (forty thousand men, as Madame de Grignan had correctly stated) was stationed in the plains of Beauce, and began work on the excavations. A rigid discipline was enforced. The officers, colonels included, were condemned to work in the service of ornamentation as previously in that of war. The

difficulties were enormous. Between the Eure and Versailles a wide valley intervened and it was a difficult matter to cross it. Technical knowledge was then very limited, hydraulics were in their infancy ; practice was unenterprising, and theory almost non-existent. Surveyors, engineers, mathematicians, all were assembled to give advice and could not agree ; but Louvois hesitated to dismiss them. The experience of Vauban, that peculiar faculty he possessed for adapting himself to Nature and causing her to obey him, seemed necessary. He was summoned, and he obeyed.

Thus the peace of Luxembourg was the cause of Vauban forming an acquaintance with the two great peaceful achievements of the reign, the Canal and the Palace. We must not imagine that Vauban, so enthusiastic over the Canal, had any prejudice against the sum spent on the Palace. He was free from modern prepossessions ; he was a very distinguished and pure-blooded Frenchman of the seventeenth century, and among other tastes he had that of magnificence. Louvois had more than once chided him on the extravagance of his schemes.

" The plans of the gate which you have submitted for the citadel of Strasbourg are too elaborate and magnificent," he wrote in November, 1681. " You must find a way of simplifying them considerably. His Majesty has too many fortresses to build to allow of elaborate gateways, which do not add to the security of the place. I beg you to reduce the

cost of them to such an extent that the two will not cost more than twelve thousand crowns together."

Vauban protested.

"This is the entry into the whole of Germany," he replied, "and the Germans, who are extremely fastidious and usually good judges, are the sort of people to estimate the magnificence of the King and the value of a fortress by the beauty of its gates."

So he pleaded for Strasbourg; for Le Quesnoy, not being able to produce similar pleas, he candidly alleged his love of the beautiful.

"I hope," he wrote, "that you will not take it amiss that a man who is a little jealous of the excellence of his work should more than once have recommended to you those details which would contribute to its ornament."

Was he then likely to be astounded if the King chose to spend large sums at Versailles and determined to build at the heart of his kingdom an unequalled and unrivalled edifice? Certainly not, and we would be mistaken if we attributed to him the ideas of a Frondeur. But there is every sign that he was surprised as soon as he arrived by the difficulties of the work he was ordered to investigate. He perused the plans, traversed the ground, surveyed the soil and pondered for a long time. How was this river, which ran at a distance of twenty leagues, to be diverted? "Vauban," wrote Madame de Maintenon, "Vauban told me that

he was two months before he found a method of achieving it." The wide and deep valley of Maintenon was the difficulty. Louvois, in sympathy with the King's taste for grandeur, upheld by the members of the Académie des Sciences, held out for an aqueduct which should cross the depression on arches. These arches would have to be very tall and built on a marshy foundation ; Vauban advised against them and proposed what he termed a "creeping aqueduct," an inverted syphon arranged on the slopes of the valley. Louvois would not listen to him, and answered by a letter which is remarkable in the history of engineering, its beginnings and its gropings.

"I tell you that you must not think of suggesting to the King your proposal for making a masonry pipe in the ground for the waters to descend and ascend. . . . You must devote all your attention and skill to devising what is best to be done in order to build an aqueduct over which the water can pass, and to explain to yourself the reason which makes me tell you that you must not think of this masonry pipe. I tell you that this pipe, which could not be less than six feet square, would be thirty-six feet in cross section, with 210 feet of head for the descent and as much for the ascent, and as water weighs seventy-two pounds to the cubic foot, it follows that your masonry would have to be strong enough to withstand 1,088,640 pounds ; and, as the fluidity of water causes it to bear equally on every side, it follows that, in order that each side of your aqueduct

should be capable of resisting the pressure which it would have to bear, supposing that each cubic foot of masonry weighed 200 pounds (which is an under-estimate, as marble alone weighs 200 pounds per cubic foot), it follows, I say, that each side of your masonry would have to be 5,443 feet thick. I think that is enough to make you see how little worthy this idea is of you and of those whom you have consulted." (16)

How was it that this administrator replied in this tone to the most practical of his technical advisers? Vauban took up the challenge. He proposed that if masonry was out of the question, the pipes could be made of iron; and he asked for the advice of a certain M. Deville on this point. He wished to avoid the use of arches at any price. "I shall not send you M. Deville," replied Louvois, "because he has no knowledge of the matter on which you desire to consult him." The reply was final, but was it true? One may doubt it, on reading a few lines lower down: "To come back to the pipes about which you wish to consult M. Deville, I think it can be assumed that it would be easy to make iron ones to support the weight of that water, but . . ." We may omit the technical argument, the conclusion alone is relevant.

"All that I have just said will make you realize that only an aqueduct on arches is to be thought of; that all other suggestion is rejected, and that it must be to this alone that you must devote your attention and give your advice."

Vauban became obstinate, and in his capacity as a professional man replied in a Memorandum entitled, "The question of the pressure of water in subterranean aqueducts." Thereupon Louvois lost his temper. "You are utterly wrong," he replied, and then suddenly exposing his mind and unveiling the reasons for his insistence, he peremptorily put an end to a discussion he knew to be barren.

"It is useless for you to think of a creeping aqueduct which the King will not hear spoken of; if the attached Memorandum is not sufficient for you to understand, the wishes of the master should prevent you from further discussion of the matter."

Now it was clear. Vauban was satisfied, as we must be. The King rejected the idea of an underground construction. He wanted arches; no matter the cost, he would provide the stone and the labour. He desired them because of their very immensity and the labour they would entail.

"The diversion of the Eure," wrote Domenico Contarini, the Venetian Ambassador, to the Most Serene Republic, "is an attempt of a supernatural power; the scheme proposed is to lead the river along an aerial course; to constrain the elements, so to speak, to exchange their domains."

This Italian had realized what Vauban had not, and he proclaimed the news in terms which would please the King; the King desired visible arches

and an aerial river, the mud carrying the masonry and the masonry the water ; he wished to cause wonderment to succeeding ages and to signalize his grandeur by an enduring monument.

Who has not seen these arches ? Isolated, half broken, the futile remains of a useless effort, but still magnificent beneath the ivy that covers them, more astonishing than any Roman remains, they recount to those who contemplate them the monotonous story of pride intoxicated and overthrown. . . . Let us not anticipate, and leave the period with which we are concerned to the glory which still surrounds it :

> " *Neptune offre ses eaux, Mercure ses soldats,*
> *On abaisse les monts, on comble les lieux bas,*
> *Et Mars en cent emplois vient seconder Bellone,*
> *Ponts, écluses, bassins, arcades et canaux,*
> *Et vos faits triomphants que la valeur couronne,*
> *Surpassent des Césars la gloire et les travaux.*[a]

Vauban ceased to oppose a project fixed in the King's mind, but he was too obstinate to abandon his idea, and succeeded so well that the plans of the aqueduct were modified and simplified. The aerial line was not indeed given up, but it was shortened by a system of subterranean working and a combination of pipe work, and the undertaking was thus reduced to less formidable dimensions.

The cutting of the first sod was the occasion of

[a] *Le Mercure Galant*, May, 1688.

great festivities ; the works became the object for a walk. More than once the courtiers accompanied the King to the camp of Maintenon, and admired with him the many workshops, the scaffolding rising to the sky, and the military manœuvres and reviews which alternated with the excavations.

The festivities did not last long. The sameness of the spectacle would no doubt have been sufficient to surfeit curiosity ; but another factor intervened, which distracted it and made expeditions scarce and cautious ; the marshy grounds of Maintenon were unhealthy, and fever set in among the proud army encamped there. It was said that it caused more casualties than the guns of Luxembourg. The engineering difficulties, besides, were enormous, as Vauban had foretold. The work was carried on in spite of all. In peace as in war the King would not draw back, and he loved to measure his glory by the greatness of the obstacles overcome. Besides, what did these difficulties at Maintenon matter ? They were nothing but a thin and feeble cloud upon a blaze of light.

Vauban had left, and was busy inspecting and fortifying the most magnificent kingdom in the world. In 1686 he once more travelled along the coasts of Brittany and Normandy and visited the fortresses in Picardy and Flanders. The year 1687 was fully occupied with work.

" In 1687, he visited the canal joining the seas

and the harbour of Cette, making the necessary plans for perfecting this great and fair work, plans which have since been executed, at least the greater part of them. He visited also, in the course of the same year, the fortresses of Rousillon and Provence, and on his return from this journey he did the same in Franche-Comté and Alsace as far as Luxembourg, where he went to meet the King, who inspected the fortifications of this town ; and after having drawn up the plans of that great and magnificent fortress of Mont-Royal, towards the end of the same year, he drew up those for Landau, both of which were approved and have since been carried out."

It was one of his greatest years. Everything was pursued simultaneously, whether peaceful or otherwise ; in Languedoc the canal was finished, and between Landau and Luxembourg Mont-Royal was equipped, a spear-head pointed towards the Rhineland, still wavering though so nearly French.

His gaze went still farther, being bounded only by the extremities of the earth. The King of Siam asked Louis for an engineer to fortify his frontiers ; Vauban named one of his assistants, who went out there to reproduce the skilful and proud French designs. Are any traces of them still to be found ? In Canada excavation has brought some to light. On an old wall in Quebec, unearthed in 1857, an inscription has been found which runs as follows :

"The fortification was begun by order of the King on April 25, 1687, under the direction of M. Denonville, the Governor, and according to the plans of M. Vauban, Inspector-General of the Fortifications of the Kingdom."

Vauban was not the man to be carried away by the sense of his own importance ; he was free from that sense of self-sufficiency which nearly always overtakes successful men of fifty, blinding and stultifying them. He kept his eyes always open ; he used his powers of observation with a sagacity and a keenness which became sharper with age, but also with a concern which has not hitherto been noticeable. *Majoresque cadunt altis de montibus umbræ* . . . a cloud was soon to fall on the bright days of the reign, a cloud the more icy and deceptive as those days were full of grandeur. Few knew of it or could perceive it. But Vauban understood. The labours of Maintenon were the omen. Vauban did not forget, silently he regretted this army, his own army of Luxembourg, which spent itself in raising above the mud these profitless arches. The omen of Maintenon was not the only one ; there were others of deeper significance, and Vauban recognized them as well.

During these years of peace, Louis XIV began the most deceptive and at the same time the most ambitious of his enterprises. Not content with having united the realm of France, the King wished to unite France in spirit, and to gather the whole of its millions in the same religious faith. He broke

with the Protestants and demanded the whole of France for the religion over which he presided. This design, long since formed, had been cautiously prepared. It was authorized by the logic of the reign and of the period alike ; one thing alone had been forgotten, that religious matters do not depend on any reign and are apt to prove incalculable.

When Louis XIV and his advisers revoked the Edict of Nantes, (17) they believed themselves to be annulling a claim which had fallen into disuse, and restoring to the orthodox fold a sect which had lost its vitality. By the time they had discovered their mistake, they had committed themselves. Could Louis XIV, before whom Europe bowed, bow before a section of his own people ? He must persist, and persistence involved persecution. Persecution was thrust upon him. It was not to his taste. This polite sovereign who saluted the serving women on the staircases of Versailles loathed brutality. It even caused him to refrain from making war ; how much greater influence should it then have in the internal affairs of the country ? But for all that his generals burnt villages, and his inspectors tortured women and children.

Versailles merely gave directions, and did not issue orders. Louis XIV could remain ignorant, or pretend to be so. At Paris and in the Ile-de-France, the Protestants were treated with precaution, and driven family by family towards the provinces

where rigorous treatment was possible. Thus the royal feelings were spared to all appearance. But Vauban, always travelling and inspecting, saw beyond this pale: he knew by what means the royal wishes were enforced and he measured their effects. In Saintonge, in Languedoc, he saw military brutality and denunciations ; on the frontiers, among the Alps and the Jura, he saw fugitives chased through forests, snow, and mountain, to be captured and led in chains to the galleys. More than once Vauban had met and questioned them on the roads ; as commissioner for the King's buildings he came across them in the prisons. There was no wretchedness unknown to Vauban. Whatever their fate might be, the Calvinists resisted. Professional men and business men closed their houses and went away. Soldiers proudly declared their refusal to reform, or deserted. Vauban lost, among others, one of his best assistants, the famous Goulon, the leader of the tunnellers who bored through the rock of Luxembourg and breached that impregnable city. Goulon subsequently took service against the King. Then the disappearance of the engineer Dupuy was reported to him. . . . Others again refused to abjure, and Louvois provided accommodation in the castle of Ham wherein the bigots might reflect at their leisure.

What did Vauban think of it all ? We may guess, although he had not yet voiced his opinion. The Royal action not at first astonished him.

" Nothing could have suited the kingdom better,"

he wrote, "than this uniformity of thought, so greatly desired, had it pleased God to bless the idea . . . the idea so pious, so holy, so just."

So the whole period had believed. But Vauban was a man of experience, and did not like to run his head against the elements of human passions. He saw that God refused this blessing ; that instead of a period of greater unity, a period of bitterness and division was about to set in ; that the losses in men and money were enormous, and all to what end ? Many said, "It is a gain if the miscreants whose presence is an insult to God are driven out." Vauban did not think so. He was a good Catholic, as all good Frenchmen were then ; he followed the offices of the Church, and wished every one to do so, had a great respect for sacred buildings, and took care to have in the fortresses under his command chaplains who were good men. But his faith was really only a praiseworthy habit : it was free from fanaticism. He was mistrustful of Churchmen. His family was numerous, but none of its men were monks, or its women nuns. He hated monks, and with good reason ; the rich abbey of Vézelay, famous in history for the harshness of its exactions, bordered on his estates at Bazoches. "Kings who have monks for their confessors," he wrote, "commit secrets of State to ill-disposed people." And again, "France will only recapture her ancient splendour by despoiling the monks and separating from Rome, not by changing her religion." He never made inquiry into

the beliefs of others ; that was a region which respect forbade him to enter.

" Kings are masters of the lives and goods of their subjects, but never of their opinions, for inward beliefs are beyond their sovereignty, and God alone can guide them whither they will."

Thus nothing obscured Vauban's vision, nothing prevented him from judging, as history was to judge that the Revocation was a foolish action. And his great wish was that the King, realizing this as soon as possible, should call a halt and set bounds to the disaster which he saw to be growing.

Did the King realize it ? It is possible. Did he wish to stop ? Perhaps. Could he do so ? His rash action had aroused the old passions that time had quelled. The activity of the sixteenth century broke out afresh, and warred against the genius of the seventeenth, already enfeebled with age. The ills of France overflowed her frontiers. Her exiles penetrated into Holland, England, Germany, even to the farthest borders of Prussia and the boundaries of Europe. They carried their rage with them, and spread it there. They were everywhere welcomed, listened to, and their stories blew into flame the dying embers of the religious wars. England conspired against her Catholic King, and the Dutch offered her a Prince and an army, commanded by Schomberg, a Marshal of the King, who had been driven from the Royal armies. Everything favoured the Revolution. Schomberg landed, England rose at his approach,

the Catholic Court was driven out, and the Protestant unity of Northern Europe was re-established. Protestant unity meant war. Louis XIV heard the mutterings of the storm, which soon grew louder ; the Emperor allied himself with the united Protestants ; even the Pope, annoyed with the Gallican King, smiled on this new league, and the people, still out of breath, took up arms in order to wage fresh wars. What would be the fate of France ? All that had been effected by Henri IV and Sully, by Louis XIII and Richelieu, by Louis XIV and Colbert ; all the reforms they had carried through were imperilled. They had built up their policy upon English neutrality and alliance with the Protestants. Suddenly all this was reversed ; a new era was to begin.

Vauban has been for some weeks on leave at Bazoches. Situated thus, separated from his workshops and his undertakings, his mind became excited and incensed. His regret, his wishes, his plans could only react upon himself. A peremptory order disturbed his leisure ; Louvois wrote to him with his own hand :

" *August* 25, 1687.

" The news which the King has received of the defeat of the Turkish army has convinced him that this is a suitable occasion to give the final touches to his frontier on the side of Germany. His Majesty has ordered me to send you this courier to inform

you that it would please him that without waiting till the leave granted you had wholly expired, you should leave your home post-haste and go to Alsace."

It appears that this annoyed Vauban. They wished him to kill himself with work. Very well, he would do so, but in exchange for what he was to give he insisted that he should be heard in high places. He left on August 28, and at the same time sent Louvois a Memorandum containing his ideas. What were these ideas, and with what subjects did they deal? We do not know, for Louvois having received it ordered him to destroy it, and this harsh order is all that remains to us.

"With regard to the Memorandum . . . I return it to you . . . so that you may suppress it instantly. . . . I tell you that if you were not more skilful in fortification than the contents of your Memorandum affords grounds for supposing that you are in the affairs there dealt with, you would not be worthy to serve the King of Narsingue, who during his lifetime had an engineer who knew neither how to read, write, or draw. If it were permitted me to write on such a subject, I should be ashamed of you had you even thought of what you have put into writing, and as I have never known you to make such a gross mistake as from the contents of the Memoir you appear to have made in this case, I can only suppose that the air of Bazoches has sapped your wits and that it was a

very good thing that you were not allowed to remain there any longer."

Both historians and biographers seek to guess the meaning of this. They can only conjecture, and can be certain of nothing. Why this reprimand, this vehemence? Had Vauban in his Memorandum criticized the Revocation of the Edict of Nantes? Such has been supposed, but without sufficient ground. On a day which was rapidly approaching Vauban was to venture on such a criticism; in another very elaborate Memorandum, very severe in its tone, he revealed his opinion, and Louvois received the document and read it without impatience or disapproval. Another subject must therefore be sought. Had Vauban proposed some new scheme of diplomacy? This too has been imagined. Once already, in 1683, he had ventured upon this subject, and Louvois had stopped him short.

"I have seen the Memorandum, dated the 15th of this month, which you sent me, containing suggestions for facilitating peace with Germany. On this subject I can reply in a few words, that if you were as poor an engineer as you are a politician, you would not be of the value you are in the service of the King." (18)

There are some elements of similarity between the two letters, but they are external only. In 1683 Louvois cut short, without irritation, what seemed to him a foolish suggestion. In 1693, Louvois was annoyed, he orders the destruction

of the Memorandum, he replied, in his own words, "if it were permitted me to write on such a subject." What could be this secret subject that was forbidden even to Louvois, the all-powerful minister? What was this subject which concerned the State and which yet escaped the control of the man who controlled everything in the State? The riddle is a difficult one. I cannot but wonder whether Vauban, following the example of Colbert whom in so many respects he resembled, had dared to criticize the sums which the King had lavished on Versailles. Louis XIV, so painstaking, so considerate, knowing so well how to listen to advice in great affairs, insisted on taking no counsel upon the conduct of his pleasure and his magnificence. Upon these he would brook no interference and listen to no argument. Louvois knew this, and regulated his behaviour accordingly. Vauban knew it too, but he was bolder. Vauban had written a little treatise entitled *Several points to be observed by those who contemplate building*. These are the opening words: "Whoever proposes to build should first of all decide to proportion the cage to the bird; that is to say, to suit his building to the revenue of his lands, his station in life, his needs, and above all to the means he has at his disposal for a creditable completion of the work. By acting otherwise he falls into extravagance or shabbiness, either of which are equally blameworthy and ridiculous."

Had he proportioned the cage to the bird, this

magnificent King? Had Vauban had the idea of applying his own reasonable maxims to him, in the manner of Sully? He was quite capable of it. What an idea! If this were the case, Louvois' horror would be understandable.

A NEW and difficult war was in prospect, a war without allies or friends. A lamentable, almost civil, war ; Huguenot France murmured and intrigued with the enemy, the Cévennes [19] were in revolt, the revenue came in slowly, the treasury was over-burdened. The Chancellor le Pelletier warned the King that his finances were not in a condition to bear the expense of a great war. Did the King realize the necessity for economy ? He stopped the works at Maintenon. Forty thousand soldiers left the camp at Beauce for trenches of another kind, leaving behind them in the inauspicious valley those unfinished arches which still produce the effect of a dream in stone.

The popular impression, which was correct, was that the King, on the pretext of war, had given up the undertaking and abandoned it for good. Such was his intention. But a mistake cannot be thus rectified, it pursues its author with its after-effects. The works of Maintenon, even after their abandonment, continued to cause the King and the country "a very considerable loss," as Chamblay wrote, "indeed almost irreparable, for the sickness . . . made great ravages among the troops and followed them to the frontiers, where in the course of a few years it carried off a large number of officers and men." [20]

Would Louis XIV cancel his other disastrous action ?

Louis XIV, the first in the field, attacked Philipsbourg, the only fortress held by the Emperor on the left bank of the Rhine. Vauban was present. He took the town in his own way, despite the impatience of Louvois, by means of cunning approaches and cross-fires. The King rewarded him with two diamonds, the choice of four cannons with which to decorate his garden, and finally that rank of Lieutenant-General of which he had been disappointed the previous year.

Meanwhile Europe rallied her forces. France was threatened on all sides, from the Pyrénées, the Rhine, the sea. Vauban had to hasten everywhere with his eyes upon every point. The coasts must be defended against the alliance of the English and Dutch ; Vauban reconnoitred them ; he stayed in Brittany and put it in a state of defence, then went from the cliffs to the dunes and made his way to Ypres where the armies were stationed. From Provence to Flanders an unknown force was gathering, and its waves beat against that thin but well-disposed line that Vauban had drawn. Disconcerting rumours spread. It was said that the French cause was not going well in the Rhineland, that the French had surrendered Mainz, that its garrison were prisoners. . . . Vauban heard the rumour and communicated it to Louvois, who reprimanded him.

" I should not have believed," he wrote, " that you were capable of believing that M. de Lorraine could capture the garrison of Mainz ; personally

I do not believe, unless an unforeseen accident happens, that the Germans can make themselves masters of the place in three months."

The rumour was rather previous than false; Mainz fell on September 7. About the same time, d'Humieres, by a careless movement, exposed the strongholds of Lille and Tournai to the Spanish cavalry, who made a deep irruption, pillaging and ravaging as they advanced. Vauban was concerned, his country did not appear to him sufficiently well defended. And Paris was so near! His thoughts were fixed on Paris, "the true heart of the kingdom, the mother of all Frenchmen and the epitome of France, by which all the population of this great State exist and which the kingdom could not afford to lose without a considerable decline of its grandeur"; Paris, "with its numerous inhabitants, naturally well-behaved and well-disposed towards its kings. . . ." Vauban spoke of it lovingly. It was natural that this Frenchman who reverenced his country should love its capital and royal town. In his written eulogy we find an echo of Montaigne's beautiful words; for his genius and his very language take us back often to the men of the sixteenth century:

". . . Paris has my heart since my childhood, and it has happened to me, as an excellent thing, that the more I have since seen beautiful towns, the more the beauty of this one engages my affections; I love it for itself, and better in its own

self than surfeited with foreign pomp. I love it tenderly, even its spots and blemishes ; I am only French by virtue of this great city, great in population, in the happiness of its situation, but above all great and incomparable in the variety and diversity of its convenience ; the glory of France and one of the noblest ornaments of the world. May God drive far away our divisions ! United and whole, I find it defended against other violence, and I believe that of all parties the worst would be that one which should introduce disorder. Her only enemy is herself, and I fear for her certainly as much as for any other part of the State. So long as she shall endure, I shall not lack a retreat in my last extremity, sufficing to solace me for the loss of all other retreats."

Like Montaigne, Vauban feared for Paris. Prompt to form his ideas, and no less prompt to draw them up in writing, he wrote a Memorandum : " The importance of Paris to France and the care which must be taken for its preservation." He advocated a double enceinte : the old one, which must be repaired, and a new one which by fortifying the heights (Belleville, Montmartre, Chaillot, Saint-Jacques and Saint-Victor) should keep enemy artillery at a distance. It was beginning to be learnt that towns could be destroyed by gun-fire, and that to protect them advanced defences were necessary. Vauban realized this. He believed that Paris, fortified in this way, would

be capable, not only of defying attack, but indeed of stopping it and of wearying the armies of a conquering enemy. The large tract of country enclosed within the defences would help to feed the population. The work involved was considerable, but not out of proportion to its utility. "The King," wrote Vauban, "has undertaken and completed other matters which considerably surpass this one." What were these matters to which Vauban referred? Was it the Canal des Deux Mers or Versailles? Louvois received the Memorandum and submitted it to His Majesty, who found it "very well argued," but decided "that it was impossible to carry it out."

Vauban remained on the frontier, patrolling and guarding it. The *Epitome of his Services* deals thus with this year so fully occupied:

"In 1689 he commanded, by His Majesty's orders, in Lower Flanders, that is to say at Dunkirk, Bergues, and Ypres, with instructions to throw himself into such of its fortresses as should be besieged, in which connection it should be noticed that the defences of Ypres being in great disorder, he worked upon them with great vigour throughout the whole campaign, being almost always present at the work, which entailed for him a serious illness of which he thought to die. At the end of this same year, before his illness had completely disabled him, he visited the nearest frontiers, especially Dinant, Charlemont, Philippville, Maubeuge, Valenciennes, and

Tournai, from whence he returned very sick to Lille."

He was at the end of his powers. Louvois and the King himself told him to go and rest at home. He obeyed, and passing through Paris on the road to Morvan, gave Louvois a new Memorandum, which, in spite of work, weariness, and ill-health, he had just completed. An idea worried him ; he felt compelled to express it, and to be once more that "advocate of the truth" that Fontenelle, a few years hence, was to praise so well.

The persecution of the Reformed Church was the subject of his Memorandum. A dangerou subject, which every one avoided or pretended to ignore ; but Vauban broached it. The damage done was already great. He examined it in detail. The persecution had caused :

1. The desertion of from eighty to a hundred thousand individuals of all sorts, who had left the kingdom and had taken with them more than thirty thousand livres of ready money. (21)

2. French arts (21) and special manufactures, mostly unknown abroad, which brought to France a large revenue from other countries.

3. The ruin of the most important branches of trade.

4. The enemy navies had been strengthened by the access of eight or nine thousand of the best sailors of the kingdom.

5. Their armies had been augmented by five or six thousand officers and from ten to twelve thousand men, far more experienced than their own, as has been only too evident on the occasions when they have been employed against France.

So much for the past. But it was the present and the future which concerned Vauban the most. He deplored the pretext given for a universal league, the food for polemics and hatred. One foreboding engaged his mind, and this foreboding, as usually happens, was false. If the King did not republish the Edict of Nantes, the Allies (22) would do so when peace came. They would demand and impose this condition. It was one of their war aims. From that time there would be two peoples in France, the first Catholic, entirely devoted to the King, the other Protestant, under foreign protection. "One would need to be blind," wrote Vauban, "not to perceive that, short of a miracle, we shall only obtain peace on the condition that the Huguenots are reinstated, either as the result of a Treaty, or voluntarily." (23)

There Vauban was wrong. He thought in terms of the sixteenth century, instead of realizing the conditions of the seventeenth. He underestimated the Royal power and the solidarity of the nation already "one and indivisible," as it was declared to be a hundred years later. The evils he predicted did not come to pass. But he was right when he drew attention to the dangers of division, the internal dissentions which would

perhaps be joined by "an infinite number of ruined and impoverished Catholics, who say nothing, yet approve neither of forcible conversion, nor perhaps of the present government, because of the miseries they suffer."

"For it is no use shutting our eyes to the fact that the interior of the kingdom is ruined; suffering, privation, and laments are everywhere. One has only to see and examine the depths of the provinces to find that these things are worse than I say. If silence is maintained and no one complains, it is because the King is feared and respected, and because every one is submissive, which is at bottom all that this implies."

It was to be the war in the Cévennes to which his warning applied. And he was absolutely right. He wrote one of the noblest pages of the period, one of the great pages of French political literature, when he drew up his admonition in these words:

"Moreover, the King and his Ministers cannot realize too vividly that the grandeur of Kings depends upon the number of their subjects. The obvious proof of this truth is that where there are no subjects, there is neither Ruler nor State, nor any form of dominion. It follows consequently that, where there are few subjects, there is but little power and grandeur, and that, where these are plentiful, the reverse is the case, especially if they be united. Whence I conclude that it is far less by the extent of States or the revenue

of Kings that their grandeur should be judged than by the number of their united and well-disposed subjects. Such is the great and most noble Kingdom of France, the most finely situated in the world, in respect of all that one could wish. It is full of a numerous people united under the same King. It is naturally war-like and capable of all arts and discipline, most obedient and loving its Kings to the extent of liberally pouring out its wealth and its lives for them. It is also very fertile and abounds in everything necessary for the maintenance of existence. It is therefore necessary to consider, and by every means to rally and recall, those whom past miseries and the rigour of conversion have driven from the Kingdom, and to succour those who remain, rather than to irritate and torment them, as has been done and as is still done in many provinces. (24)

" May the King then, while he still retains the full measure of his power and his free will, give freely that which will be demanded of him in the future ; let him rally and recall his subjects, but now faithful ; let him republish the Edict of Nantes, let him give back the chapels, annul the confiscations, reinstate every one in the full enjoyment of his goods, and finally let him leave to Providence alone the care of saving those who have not shown a desire to profit by his good intentions."

Louvois' answer is scarcely less interesting.

January 5, 1690.

"I have received your letter of the 28th of last month, together with the memorandum attached to it. You speak so casually of the state of your health that I am not satisfied with what you tell me. I beg you to give me further detailed information. I have read your memorandum and found many excellent things in it; but, between ourselves, these are a trifle exaggerated; I will endeavour to read them to the King."

It is obvious that Louvois had read Vauban's memorandum closely and without annoyance. He knew the problem. How should he not have done so? Chamlay, his private secretary, thought as Vauban did, and doubtless many others in the Army and the Civil Service. But Louvois feared the King; the King had never yielded, and made it a point of honour to stand firm; he considered the conversion of the Protestants to be his particular duty, the purest ray of his glory. For a whole fortnight he himself presided over the Council of the Newly Converted, and his natural tenacity was strengthened by his awakening devotion. He sought to obtain through the merits of the Revocation the absolution of his sins of love, and the salvation of his soul. Did Louvois read Vauban's memorandum to the King? If he did so, it had no effect. During the whole war, the King made no concession to those who remained faithful to the proscribed religion.

We do not know the nature of Vauban's illness. Probably he suffered from trouble with his lungs, the weak spot in his powerful body. Whatever it was, the trouble was serious and long drawn out, and Versailles was deeply concerned at it. At last in the Spring Vauban recovered and was able to begin work again. Louvois had by May drawn up a journey to occupy his convalescence.

"The King thinks it well that as soon as your health allows you to leave home, you should come here, whence, after a stay of eight or ten days in order to reply to the questions which M. de Seignelai and I desire to put to you, it is the intention of His Majesty that you should proceed to Guise, where you will assemble the engineers of Hainault to render an account of the state of their fortresses, and where you will make up your reports upon what remains to be done; after which, going through Cambrai, Valenciennes, Condé, Tournai, Lille and Ypres, you can reach Montreuil (25) by way of Bethune and Aire. His Majesty wishes you to remain at Montreuil where the air is good, until the intentions of the Prince of Orange develop, for should he set foot in Flanders, the King wishes you to go to Dunkirk, and should he direct his march in another direction, His Majesty wishes you to go to Sedan, about August 10 or 12, where you will assemble the engineers of Dinant and Charlemont, and thence to Luxembourg, Thionville, and Sarrelouis, from whence you will travel to Mont-Royal, if it can

be done safely ; if not, you will send the engineers there and then go to Landau, and from there return home by way of Huningue. . . ."

These were men who knew what work meant. Vauban, as a matter of fact, cut short the tour. We find him in September resting at Bazoches. It was no doubt in the course of this year that he planned and carried out the work which gave the architecture of the period to the medieval building he had bought ; on the façade facing east, the width and arrangement of the windows and the frieze above them ; on the north, the new door with its ornamental stone work ; on the east, by the side of the old rustic entrance, the outhouses, the drinking places and the spacious central basin into which flows the water from the wooded hills, constant and fresh at all times of the year. Bazoches, thus renovated, was worthy of the installation of the cannons of Philipsbourg on its terraces.

In 1691, Vauban had completely recovered. At the end of December, 1690, he left his château, taking with him his daughter Jeanne-Françoise, aged twelve and three months. On January 8 the child was married at Saint-Roch to M. de Valentinay, to whom she had been betrothed since she was eight. Her mother did not attend the ceremony. Scarcely more than a rustic housewife, being able only with difficulty to sign her name on the register, she never went to Paris. Besides, Vauban had no time to spare. The

King, who was going in person to invest Mons, took him with him. The siege was rapid and successful, and Dangeau notes in his journal under date April 9, 1691 :

" The King this morning gave Vauban a hundred thousand francs and invited him to dinner, an honour which he prized more than the money ; he had never before had the honour of dining with the King." (26)

The King left Mons, but Vauban remained. Gun-fire and mines had destroyed the defences, and he rebuilt them. Louvois wrote to him without intermission. It is always interesting to watch the collaboration of these men, both impetuous, one with a bitter and hard violence, seeming to grow harder and more bitter every year, the other with a generous, benevolent insistence seeming to grow yearly more benign. Since the death of Colbert, the whole weight of the kingdom was on Louvois' shoulders, and his master was hard to please. " The Ministers," wrote Vauban, " are highly-placed slaves who enjoy no liberty." Louvois was the most highly placed of all these slaves ; his labours tormented and exhausted him. In each of his letters one can trace a hand which tended to become weary and discontented.

" . . . I cannot finish this letter," he wrote, " without reminding you that it is seven weeks to-day since the Royal troops entered Mons, and that I have not yet been able to secure your plans ;

I declare that I cannot observe such extraordinary dilatoriness without annoyance. If the Chevalier de Clerville were alive you would show far greater diligence. . . ."

What a ridiculous notion, that Vauban should need hastening by Clerville! Never behindhand in bluntness, Vauban replied:

"I thank you most respectfully, Monseigneur, for the kindness with which you ask news of my health; when you honour me less frequently with your letters, and so give me greater leisure for the completion of the plans of Mons, I hope that I shall be able to regain my health and give you cause for satisfaction; otherwise I perceive that I shall not achieve either the one or the other."

In June there was a fresh interchange of letters, entailing a new dispute. Brussels was about to be invested, and, as Louvois wished, bombarded. "The King," he wrote, "has no other means of humiliating those who annoy him to the full extent of their power, and there is no evil which the people of that city fear more than this."

This manner of making war need not astonish us; it is our own. But in the seventeenth century, barbarity was something new, and caused repugnance. Frederick of Brandenburg, King of Prussia, had introduced it, to the scandal of Europe. When Segnelai had bombarded Genoa, the formidable Duquesne had locked himself in his cabin that he might have no share in the massacre, in

this killing of women and children. Vauban was of the same mind as Duquesne ; he disapproved of the bombardment, and said so.

"M. de Luxembourg has spoken to me of bombarding Brussels," he replied. "But as I have observed that the bombardments of Oudenard, Luxembourg, or even Liège, have not resulted in the gain of an inch of territory for the King, and that, on the contrary, they have consumed much valuable ammunition, besides fatiguing and wearying the troops, I have been anxious to tell him nothing on the matter, for it also seems to me that it is a very bad way to conciliate the hearts of a people at a time when the minds of the inhabitants of this country are better disposed towards the King than they have ever been."

This was the last letter which Vauban addressed to Louvois, for in July, 1691, Louvois died. A dispute with the King and a fit of temper brought on a seizure, which defeated and overwhelmed that mighty champion. Who was to replace him ? Once there had been Turenne and Condé, Colbert (27) and Louvois. The last support of the reign had fallen, the King remained alone. France and Europe wondered. Would the genius of this proud, hard-working King fill the place of his vanished servants ? He himself believed so and took upon himself every duty, without betraying a sign of uneasiness or fatigue. He took care to announce personally to Vauban the death of their common Minister.

"MONSIEUR DE VAUBAN,

"I do not doubt that you are grieved at the death of the Marquis de Louvois. As he was entrusted with the defences of the fortresses of my Kingdom, I have thought it to my advantage to appoint some one to that duty as soon as possible, and that I could make no better choice than Sieur Le Pelletier, the Inspector of my Finances. I have ordered him to consult you upon all matters touching that duty, and I rely upon the zeal that you have in my service for your advice to him to the full extent of your ability. And as the present is merely the preparation for the future, I pray that you, M. de Vauban, are in God's holy and worthy care. . . ."

And now he must strike, so that Europe might learn that the vigour of France was unimpaired. Louis XIV laid siege to Namur. Cohoern, as celebrated among the Imperial armies as Vauban among the French, shut himself up in the city he had built and prepared to defend it. Louis XIV summoned Vauban, his engineer, and Racine, his historian, and set out to command his army in person. A sorry train, compared with that of his resplendent years! Gone were the young and lovely mistresses, who had bloomed before Lille or Besançon. The King had no longer use for them. Pleasure no longer appealed to him, but his strength remained unimpaired. The investment was begun, and in a welter of blood

and mire the terrible business was vigorously pushed on. Vauban did everything ; he directed the works, launched the assaults, calculated trajectories and inspired the troops. This is not apparent from the official account ; Racine, true to his type, reserved all the glory for the King. But in writing to his friend Boileau, he told a different story, and M. de Vauban came first in his account. Up till now Racine had hardly known him ; now, for the first time, he observed and appreciated him. The poet conceived a profound respect for the scientific, human, impetuous soldier.

" M. de Vauban, with his cannon and his bombs, was alone responsible for the enterprise. He selected heights on either side of the Meuse on which he placed his batteries. He drew his main trench-line in a fairly confined space between the hills and a sort of pond on one hand and the Meuse on the other. In three days he had advanced his works as far as a brook which runs at the foot of the counterscarp, and from there, in less than sixteen hours, he carried the whole of the covered way . . . so that this formidable fortress of Namur saw all its environs captured in the short space of time I have described to you, without it having cost the King more than thirty men."

The environs once taken, it remained to seize the fortress. The difficulties were great, and Vauban was well aware of them. " I have seen him before Namur," wrote his friend Catinat

later, "brimming over with anxiety." We may remember these words, which illuminate so clearly the secret mind of Vauban. The chronicler describes the powerful leader, the infallible conqueror. Catinat, who was his friend, shows us in a single phrase the anxieties of the heart. Vauban, outwardly so strong, was a nervous man who overcame his nervousness. Nervousness of mind, of heart, we see them grow until they invade the whole field of his soul. But the army had no suspicion of this. Vauban directed the final assault with that unequalled authority, both military and patriarchal, which so delighted Racine. He wrote of it to Boileau, no mean judge of such things :

"I must tell you two of M. de Vauban's ways, which I am sure will please you. As he knew the ardour of soldiers in such attacks, he said to them, 'My children, you are by no means forbidden to chase the enemy when he runs away, but I would not have you caught at a disadvantage on the counterscarp of his second line. I therefore have by me five drummers to recall you at the proper moment. As soon as you hear them, do not fail to return each one to his post.' This was done as he had arranged. So much for his first precaution. Now for his second. As the work which was to be attacked had a very long front, he had stakes fixed in our trenches, opposite each of which a particular party was to attack and establish itself in order to avoid confusion.

The scheme worked admirably. The enemy did not even await our men, and fled after firing a single volley. Quite four or five hundred of them were killed."

The fortress surrendered, but Château-Neuf still held out. Cohoern had flung himself into it and had even, so it was said, mined the moat. The French engineers, soldiers, builders of the Canal des Deux Mers and excavators of Versailles, showed what their experience and their hands could do ; in ten days the citadel was encircled and overpowered. "In truth," wrote Racine, "our trenches are something miraculous, comprising several valleys, with such an infinity of ramifications, that there are nearly as many of them as there are streets in Paris."

In those days France added to her valour and her hereditary gifts, a power of organization unique in Europe. Namur was taken.

While on land France had won the war, at sea she had lost it. At La Hogue the English took, burnt or drove ashore twenty large vessels. The King's navy, the achievement of Colbert, was now defeated, and only a Colbert could rebuild it. The French are only vaguely conversant with naval matters ; their past, their present and their future lies on land, and their outlook is directed not towards their coast line but towards the land frontiers where danger always is lurking. In that direction press the starving peoples of Europe

and Asia, who struggle forward to seize the good things of France. These frontiers must be buttressed and held fast, till victory or death. In the past and in the future, that is the task of France. Vauban instinctively realized that task, and so the man chosen by Louis XIV, henceforth almost alone at the helm of State, to advise him was this great Frenchman and lover of France. He was now sixty, a man still full of vigour and now full of authority. Who knew the army and France better than he did? Who better than he could carry on the traditions of the great men of 1660, a generation which died, never to be replaced? He was looked up to, and his advice was sought.

About this time, Saint-Simon, then very young, met him at Versailles and saw him as he describes him to us.

"A man of medium height, rather squat, with the typical look of a soldier, but at the same time extremely boorish and coarse, not to say brutal and fierce." In reality he was the very reverse; never was man more gentle, more tender, more obliging, more respectful; having, beneath a polite manner and the most scrupulous care for the lives of his men, a courage which embraced all and inspired as much in others.

This builder of earthworks lacked the skill of a courtier, and men might have sneered at him had not the King shown him so much respect, we might even say friendship. Vauban was allowed to say anything, and freedom of speech was his

privilege, to which he clung tightly. "The King, who, I am proud to say, knows me thoroughly," he wrote to Chamillart in 1695, "is used to all my freedom of speech, and were I to cease to be free, he would take me for a man turned courtier, and would no longer have confidence in my words. It would be better, if it please you, to have the goodness to tell him things as I write them ; His Majesty knowing better than anyone that I have no evil design will pardon me sooner than another the bluntness which escapes me ; which is a thing, if it please you, between ourselves." Thus no one sneered, and all spoke of M. de Vauban with great respect.

There is a pleasant anecdote of the times, in which the King and Vauban stand out clearly. One day when they were working together, Vauban, always concerned for his friends, allowed himself to bring before the notice of the King a citizen of St. Malo, a devout and generous man, asking on his behalf a patent of nobility. "No," said the King. "I cannot do it. Nobility is the reward of birth." Upon which Vauban took offence, picked up his papers and rose without a word. By a lucky chance a letter written by an engineer named Garengeau tells us the sequel.

"The King asked him where he was going ; he answered his Majesty that he was not in the mood for work. When he attended the King's levee next day the King made no remark to him, nor did he the following day at dinner or supper,

which caused Vauban great uneasiness. The third day he presented himself before the King as His Majesty was going to Mass. His Majesty drew him into an alcove of the gallery, and said to him : 'Vauban, I am not angry with you, I grant you a patent of nobility for your friend.'"

There was much to do, and the King had no time for sulking. The moment was favourable. The uncertainty and popular discontent which had lately caused anxiety had died down. France remained united and obedient. The Protestant nobility, submitting of its own accord, came back in force to its old allegiance. The hatreds of the sixteenth century, aroused for an instant, gave place to the loyalty of this Royalist century.

Louis XIV applied all his care to the strengthening of his armies. Up till now his cavalry had been unrivalled, but his infantry was not of so high a standard, and was recruited mainly from Swiss or German mercenaries. The French peasant was devoid of martial attributes. This was a serious inferiority. Louis XIV determined that it must cease, and raised fifteen new regiments among his own subjects. His idea was to surprise the Imperial armies and crush them under the weight of numbers.

Many technical problems remained to be solved. How were these masses to be trained and armed ? The pusillanimous successors of Louvois discussed the matter without arriving at any conclusion. Should they revert to halberds, to be carried in

battle once more, as at Crécy and Poitiers? The halberd had still its advocates among army leaders. Should they keep the unsatisfactory and awkward musket? Vauban's ideas on these questions were clear and have been completely justified by subsequent developments.

"I am not an advocate of pikes," he wrote, "far from it; for more than twelve years I have railed constantly against them and against those muskets which I consider no less defective than the pikes themselves; my reason being that out of twenty times that a battalion finds itself in action, it rarely happens that it has three times had the opportunity of crossing pikes with the enemy, and even that has only occurred between some of the officers in the whole twenty times while there has always been much firing which would have been a third or a quarter more intense if, instead of their pikes, they had used their fire-arms."

So both pike and musket were condemned. The musket was fired by means of a match; if the match was damp, the weapon was useless, and accidents were frequent. Vauban knew the weapon that was required. For twenty-five years his mind had been made up, (28) for more than ten years he had had models made:

"I have a complete equipment for a soldier such as I desire he should have in order to be well armed; it is of a singular nature but very convenient, which I will have made directly after

my return from the siege of Luxembourg in order to suggest it to you as a pattern."

Vauban recommended the flint-lock, and at the end of the weapon a knife fixed by means of an external socket which would not interfere with firing. (29) We know this weapon and knife. We have carried them ourselves. It was the weapon of the soldiers of Jemmapes and Austerlitz, of Isly and of Alma, of the zouaves of Patay, and right up to the last war it has been the favourite weapon of the French. Vauban suggested it, and was listened to. In 1693 the rearmament was begun, and the new infantry was equipped with the bayonet.

But it was not enough to have provided the material armament. The moral qualities of this army, which had fought for a quarter of a century, and which was becoming weary and disheartened, needed attention. A modern reader would think of the troops themselves, and I believe that Vauban too did not fail to think of them. In frequent passages in his letters and memoirs he is to be found eager to learn the worth of the private soldier, and to cultivate in him friendship and honour. But he was alone in these ideas, which sprang from the warmth of his heart. The private soldier of the seventeenth century was treated with a harshness which every one took for granted. He was less a soldier, in the sense in which the word is employed to-day, than a labourer

in the service of the King's officers. The true soldier, or to use the mediæval term, the "man-at-arms," the man to be considered, was the officer of lower grade, either an impoverished nobleman or a cadet of a good house. To him the glory of the great reign cost infinite hardships and bestowed little reward. Where did this dazzling glory go to? It was concentrated upon the Court, which astonished Europe, and the more splendour it shed there, the darker and sadder seemed the shadow in which the poor nobility worked and served. Vauban knew something of it, for he was of that caste. In the armies which he had known in the days of his youth, warrior bands led by Gassion, Turenne, Condé, conditions were more equitable and honours better distributed; the service, in fact, was on better terms.

After thirty years of victory, the true nobility, altogether rural and military, and devoted to its traditions, found itself humiliated by Staff Officers and their privileges. Of a different class, spoilt by the intrigues of the Court and marriages for money, mingling the blood of warriors with that of lackeys grown rich, these men had raised themselves above the old nobility. The gentlemen-at-arms, doubly eclipsed, watched jealously the rapid promotions which Court favour and money assured. What would have been the career of Vauban himself, but for the chance of a great King and a far-sighted Minister? He was lucky,

and he knew it. "Virtue," remarked the discreet Fontonelle in this connection, "Virtue is rewarded —sometimes." It certainly was in the person of Vauban. But he was not the kind of man that allows himself to be spoilt by his own good fortune. We have but to listen to him and read his letters, to learn with what persistence he set himself to make the acquaintance of the brave and good men of his class, the unfortunates who had had no opportunity, with what obstinacy he pursued the task of bringing them to the notice of those in authority. Doubtless they lacked his genius, but he ignored this, and treated their cause as similar to his own. Besides, even though they lacked genius, they possessed those qualities of valour, loyalty and firmness without which the genius of a leader can effect nothing. Vauban, who never asked anything for himself, lost no opportunity of pleading their cause and pledging his credit on their behalf. Thus his official correspondence is illustrated with brief but engaging sketches, short descriptions and summaries of services ; and thanks to him we learn something of those sturdy figures, the officers of the line of the old army, lieutenants and captains, an inferior world which history leaves unchronicled, a world sacrificed by a period as cruel as it was magnificent.

Louis XIV, it is said, dismissed many strongly urged representations with a brief and decisive phrase. "You speak to me of a man whom I

never see," he would say. True enough ; how could a poor man come to Versailles and there display his poverty ? For the amusement of the great, Molière created M. de Pourceaugnac, and we still laugh at that character. On that occasion Molière was ill-inspired and definitely harmed his country. M. de Pourceaugnac was worthy of encouragement ; he had served as a valiant officer. His real crime was that he did not ride in the King's carriages, and this is a crime of a sort that the world can scarcely forgive. But Vauban constituted himself the advocate of those who did not ride in the King's carriages. He mentions them and talks about them ; and thanks to him we know something of them.

In order to find his clients he had only to seek among his own people : " I have a poor devil of a cousin," he wrote to Louvois in 1675, " a lieutenant in the cavalry regiment of Nonan, an excellent officer who would have been a captain long ago if he had possessed the secret of changing bad troops into good ones without ruining himself. He is in garrison at Maestricht ; should you learn, Monseigneur, that he has done his duty, I beg you to do something to better his condition, for he has lost all, but chiefly the payment of his winter-quarters, the whole of which is still owing to him."

We find no further mention of this unfortunate cousin. Vauban's real family was the whole personnel of the army. Any obscure person, whose

work had by chance come to his notice, interested him at once, and he reported the matter to the authorities, calling attention urgently and insistently to qualities not sufficiently known or utilized. There were very many cases of this kind. For instance, poor d'Esperoux who was wasted at Brisach.

"Shall it be said, Monseigneur, that one of the best officers in the kingdom is allowed to stagnate and waste his whole life doing nothing? . . . There is no man in the Kingdom more capable of the post of Lieutenant of the King at Landau or Philipsbourg than he."

Landau and Philipsbourg were posts of great responsibility, advanced fortresses of the frontier which Vauban deemed of the first importance. We may be sure that he did not write without due consideration, and that d'Esperoux was worthy of the honour which Vauban sought for him. But some ill-fortune seems to have pursued this man, and his career progressed but slowly. He died in 1724, Lieutenant of the King at Thionville.

There were others again. St. Vincent, "The Excellent St. Vincent," after twenty years as second-in-command, aspired to the Lieutenancy which he deserved. Was he to secure it at last? Vauban gave it as his opinion that it would be doing him an injustice to refuse it. But one suggestion involved another. If St. Vincent obtained his Lieutenancy, his post of second-in-

command would become vacant. Who was to fill it? Vauban suggested the name of La Viarde, a fine conscientious soldier, who had been for a long time a captain of the gate, and whose two sons were in the King's service. But if this captaincy were thus to become vacant, to whom should it be given? Vauban was not at a loss; he had a candidate ready in the person of the faithful Godignon, his chief draughtsman, "who knows what fighting is as well as anybody, seeing that he had his thigh broken by a musket-ball at the siege of Puycerda." Did St. Vincent, La Viarde, Godignon, obtain these humble appointments? We do not know.

Let us now make the acquaintance of Pontis. Vauban had met him in some corner of Savoy. "He is a man with little service to his credit, but with plenty of intelligence and courage, and, what is more to the point, he has had the pleasure of seeing the lands whose name he bears burnt up, and by way of reward he has permission to destroy his own property, which he does honourably and in good faith." Could he not have some command, worth three hundred livres a month? These were all honest men, and perhaps had remained unknown as a result of their very honesty. Vauban remarked that this was so. "The Chevalier de Lerete is a very good man, and had he not been so conscientious, he would have found himself much better off than he is."

It must not be supposed that Vauban had a penchant for the unlucky, that would have been a culpable symptom, a proof of innate weakness and bitterness. Vauban was completely free from such ideas, he merely knew how to distinguish young officers who knew the meaning of glory. That young sailor of twenty-seven whom he noticed at Dunkirk was to be as fortunate as he was capable. "Be good enough, if it please you, Monseigneur, to remember M. Jean Bart (30) of Dunkirk. It is time you moved him up a notch. . . ." The Minister did remember him, and we remember him still.

Vauban sometimes let his pen run on and amused himself by describing the characters he met. On one such occasion, the subject was an unknown gentleman, the Governor of the Ile de Ré. The man pleased him, and he says :

"I feel it my duty to inform M. de Launay that I have never met a Governor in the whole of France who knew his duties better than this man, or who betrayed a greater devotion to the service. He leads the life of a very honest man and a public benefactor, for there is no other inn in the whole place apart from his own table, and far from taking a sou from those who frequent it, he gives money every day from his own resources to settle the disputes of the inhabitants. He is greatly beloved. Were he to leave the place, there would be no bread to eat there a week later. As a matter of fact, when I arrived, he was host and hotel-keeper, Governor,

Second-in-command, and porter, and I think that things are still the same."

Here is another sketch of a gentleman ; a noble of Embrun, by name d'Arbaud de la Peyrouse. Embrun had been besieged ; ([31]) before, during, and after the siege this d'Arbaud had done his duty perfectly, and Vauban wished the King to know it. Before the siege he had persuaded the citizens to burn the villas they owned outside the town, to destroy their gardens and cut down their trees. He himself set the example, torch in hand, by destroying his own property, and all the citizens followed his example. During the siege, he collected lead and pewter, and supervised the moulding of bullets ; he gave his wine to the officers and men and carried food to the trenches. After the siege was over and the town taken, he received the enemy generals and by his skill and dexterity prevented a sack. Would the King forget such excellent services ?

At this same siege (continues Vauban, never tired of doing justice), there was another man who richly deserved reward ; this was Robert, the engineer. As a reward he had been promised by Louvois that he should retain his company ; but on the death of Louvois, it had been taken away from him, and at the same time he had been deprived of the pay which was owing him for twelve or thirteen months.

" This unhappy Robert, who works like a galley-slave until he is nothing but skin and bone, and

who kills himself at his job, is paid by the King no more than fifty crowns a month, at the end of twenty-five years' hard service, during which he has never been accused of any self-interest. Is not this a splendid career and one to be envied!"

Unhappy Robert indeed! We hear of him again after ten years. The Spaniards had taken him prisoner, and he came out of the martyrdom of their gaols a broken man. He could serve no longer; he had given all he possessed to the King.

"He is a very fine man," wrote Vauban. "Broken to pieces in the King's service, he deserves better than any one in the world a good pension which would keep him from want for the rest of his days."

Was he to get his pension? Did he die in poverty? Did death find him in some paupers' home? We may believe that he was one of those to whom Vauban extended his generosity. These cases were so secret that no trace of them remains, and so plentiful that he was frequently embarrassed himself. "Is it not right," he said, "that I should thus make restitution of what I receive in excess from the bounty of the King?"

How many of these men there were! That soldier of fortune, who had become a lieutenant by sheer merit, a sapper officer, so wrapped up in his duties that he had no shelter but the trenches throughout the duration of the siege, could he not be given as a reward the captaincy of the gates at

Tournai? The question was never answered. That La Combe, brave to the point of rashness, who had taken part in every siege during the last twenty years, could he not be appointed second-in-command of a fortress? He was an honest man; he deserved the appointment, and only sought it on condition that he should continue to serve in all the sieges which were in contemplation. Let it be granted him, it was only fair. . . . The list grows; La Coutardière, in command at Entrevaux, so punctual in his duties; Auberon, an excellent and most capable man "who never waits for his duties to seek him out, but intelligently and with understanding goes in search of them himself; he is a man who is in need of your help, and it is a testimony to the honesty of his nature that he has clean hands, for if he had not he would only have had to petition you for some increase of pay." And Laubanie, an excellent soldier; and La Frezelière, a young and distinguished officer "if he goes on, he will certainly be the foremost Artilleryman of his time"; and Dezède, "good in any capacity." Alas, Laubanie lost his sight in the defence of Landau,(32) La Frezelière was killed at the age of thirty-nine and Dezède only survived Vauban's eulogy by two years. What worth, what obscure heroism, what genius cut off in its flower! It is upon these that the greatness and security of a nation are founded. Many did not know, or, having known, forgot. Vauban alone knew and did not forget. "It is the men made in this mould,"

he wrote to Louvois, " who are the saviours of the State."

These constantly renewed recommendations did not satisfy him. He considered the difficult circumstances of these impecunious officers and of the families they came from, and thought over means of ameliorating them. With his ingenious mind and ready hand, Vauban thought out schemes and immediately committed them to paper. About this time he compiled a Memorandum entitled " A scheme for an excellent nobility." Vauban is famous for his love of the people, and his fame is deserved, but this great Frenchman loved all the orders of the Kingdom of France, and his love for the true nobility, which lived on the land and served in the army, was equal to his love of the people. Who has better described it, or praised it more worthily ?

" It is a remarkable thing that during seven or eight years, this Kingdom which has maintained so many long and cruel wars against its neighbours has employed in its defence the nobility alone, and that it has always been well served by it. Since the beginning of the employment of regular troops, it has been the nobility which, as an inexhaustible nursery of valiant men, has provided the officers, senior and junior, on land and sea. How many Constables, Admirals, Marshals of France and Generals of Armies have come from this illustrious body. . . . Is there any part of the world which

has seen war waged where this illustrious nobility has not distinguished itself by conspicuous valour. . . . Has not the extensive Officers' Corps always surpassed by land and sea the officers of the enemy in courage, gallantry and faithfulness? The whole world is full of their renown, the enemy himself bears witness to it and knows that it is by these men that he has so often been vanquished. It is then quite rightly that Kings have established the nobility, that they have considered it as their right arm, that they have chosen their friends and companions from it, and that they have allied themselves with it whenever opportunity has arisen But it is necessary that continued support should be afforded it, that these men should be taken better care of, with more thought for their education, and that they should not be degraded as it would appear has been done for some time past, even on purpose."

"Even on purpose." In these words we get a glimpse of that feeling of annoyance which Saint-Simon was to illustrate for us so vividly. But Vauban was no faction leader, and his partizanship was restrained by his devotion. Without useless annoyance he stated and considered the facts. The King's agents, if not the King himself, had a grudge against the nobility. What was then to be done to support that class? Vauban pointed out the way: check the venality of the higher ranks, pay the junior officers better, assist, by the establishment of special schools, the military education which the

nobility found it so difficult to give their children (by which means the State would gain the scientific officers it so greatly needed), provide retreats for their old age. All this on the one hand ; on the other, put a stop to the sale of patents of nobility, no longer introduce into that body so many people whose only merit was that they had "robbed the public and the individual without risking so much as a cold in the service of the State." The nobility had for its historical origin its services and its merit. Services and merit, not riches, should remain its qualification.

On this subject Vauban wrote thoroughly sound words, which might be termed exceedingly fine, if high-mindedness and the possession of far-reaching ideas were sufficient to achieve fine writing. But for this other qualities are required ; a certain orderliness and a polished style, both of which were lacking. For this reason alone this great soldier, so vehement in the expression of his ideas, cannot be acclaimed as a great writer. Here is a passage which is not in the style of Bossuet, of Molière, or of Saint-Simon, but which is nevertheless worthy of remembrance, compiled by a Frenchman who breathed the same air as Bossuet, Molière, and Saint-Simon.

"In the not very distant ages, nobility was the reward of a long succession of important services and the recompense of valour and of blood shed in the service of the State. It was essential in addition to have lived a life without reproach, to have been

of honeſt parents, who were neither of ſervile condition nor of an abject or base profession. To-day all these conditions are no longer requisite, and nobility can be acquired much more easily. It is no longer, or at leaſt it is very rarely, this dangerous valour, this merit which coſts so much to gain, that creates nobles ; it is not the record of services rendered to the State, or wounds received in its defence, ſtill less virtue or that highly-prized probity, or a blameless life, which lead to true nobility. These qualifications are no longer considered. That which should be the juſt recompense of noble deeds and of blood spilt during several years of service is now awarded for money. This is why secretaries, inspectors, treasurers, commissioners for war, receivers of taxes, electors, business men of all sorts, Commissioners and Sub-Commissioners, Miniſters and Secretaries of State, even their servants and others of the same kidney, can acquire nobility very much more easily than brave and honeſt men of the world who have no means of paying for it. A secretaryship to the King, usually sold by auction to the higheſt bidder, is a sure means of achieving it. It is only necessary to purchase such a poſt to become as noble as the King himself, and whoever has the means can do so ; for it is only necessary to be on the spot. I have seen men who have toiled all their lives with their hands, and who have become secretaries to the King ; and any man who by his induſtry has found means to secure a competency, no matter how, finds himself in a

position to ennoble his thefts by one of these purchases, or by obtaining letters of nobility by some means or other, if he cares to take the trouble and to pay for it. There are besides I know not how many posts connected with Law and Finance throughout the Kingdom which confer nobility upon their holders ; but, how shall I say it, not one warlike appointment, not even, I believe, that of Marshal of France. This is an astonishing thing if the ends for which the nobility was created are considered, since these were entirely military and for services rendered in war, which had to be proved in order to obtain a patent."

On the one hand stop selling patents of nobility, and on the other restrain the venality of the higher ranks ; that is to say, on the one hand reduce the revenues and on the other hand increase the expenses. Could Louis XIV do this ? The wars compelled him to raise money by every means. Instead of a difficult and costly reform, a symbol was found, and this symbol was sufficient to revive failing spirits.

A persistent tradition tells us that it was on the advice of Vauban that Louis XIV founded the Order of St. Louis which up to the time of the Revolution was so precious to the officers and so popular with the army.

It was an Order open to all. Any officer, noble or plebeian (and plebeian officers were quite common in the service of Louis XIV), so long as he had

served for ten years, could become a Knight. The old Order of the Holy Ghost was differently constituted, it was only open to nobles of old and proved lineage ; a man like Catinat, Marshal of France and citizen of Paris, could not aspire to it. All the orders of Europe had this same characteristic, this aristocratic limitation. The new institution sought and rewarded merit alone. It was thus profoundly French and conformed to the spirit of the Bourbon monarchy, itself so closely attached to the spirit of France, as Vauban pointed out so clearly.

With the institution of the Order was linked a donation of 300,000 livres, destined for the foundation of Institutions for Pensioners. Disabled officers, " broken to pieces," in Vauban's words, who retired to these Institutions, would thus have their old age cared for. Eight Grand Crosses were awarded at once, and Vauban received one of them. Dangeau mentions this award in his journal under the date of May 8, 1693. A few days later, Louis XIV rejoined his army and took his place at its head.

The most vociferous welcome of his reign greeted him ; all desired to be found worthy of this new honour by which the King declared his personal appreciation of his soldiers. Never had he been more greatly loved and respected.

The moment promised brilliantly, but it was allowed to pass. Louis XIV had his enemies at his mercy. He was in a position to hurl upon them

a hundred and ten thousand men whose *morale* was of the best. But he lacked his youth and the genius of the men who had gone. Louis XIV was a statesman, not a warrior. He had not the warlike spirit. Just as the orderly conduct of a siege suited his abilities, so did the hurry of marches and the hazard of battle displease and worry him. Even in his youth, he disliked exposing himself. Now, in 1693, it was a case for open manœuvres and engagements. He hesitated, and the opportunity passed, not to return. Louis XIV went back to Versailles, scattering his forces and leaving a diminished army with Luxembourg. Luxembourg offered battle, however, and at Nerwinden won a victory and took Charleroi. It was good so far as it went, but greater things had been hoped for. Were these few leagues gained to be the sole reward for so much effort and so many lives? From then onwards the war dragged, being waged between weakened adversaries whose common preoccupation was to find bread for their soldiers and grass for their horses. It settled down, a slow and incurable evil, upon the whole length of the frontiers.

But there was no repose for Vauban. M. de Savoie, taking the offensive, compelled Catinat to retreat, and, outflanking the Alps, threatened Provence after having sacked Embrun and Gap in Dauphiné. Vauban was required in that quarter. Barbezieux (the successor of Louvois), ordered him in courteous words to proceed thither. "Indeed,"

he said, " I sympathize with the weariness which I have no doubt you feel ; but it is essential that you should make the journey. . . ." Vauban, unaccustomed to so much politeness, answered sharply ; henceforth, he said, being past sixty, he would perform his duties strictly, and without unnecessary ardour. " I will wager," wrote Barbezieux, still polite, " that if it were necessary you would risk serving again as a volunteer although you tell me otherwise in your letter. . . ." Vauban left, visited Provence and the Alps, blowing on his fingers, as he put it, and shaken by his cough, that determined enemy that attacked his chest and led him to the grave. Barbezieux was right ; Vauban became enthusiastic over his new task, and forgot to act without ardour.

" My journey has taken me into the wretchedest province in the Kingdom, where most of the land is burnt up, where the enemy has foraged and devastated the harvest, and where little or no sowing has been done. Sickness and hunger are either killing or will kill three-quarters of the population of Embrunois and Gapençois before the end of next May, if the King in his bounty does not give or lend them a good quantity of corn. . . . I venture to tell you that of all the miseries which I have seen in my life, none has touched me as deeply as this."

Certainly, they had done well to send him.

" It is necessary," he wrote, " to build a frontier in this province ; and it was a great mistake to

believe that none other than the Alps was required, for they can be crossed at all points at certain times, and are as much in favour of the enemy as of us. It was very unfortunate that such a frontier did not exist in the time of Charles V and Charles-Emmanuel. . . ."

He studied passes and valleys. The defence of mountains was an unknown problem to him. Summit commanded summit; it was necessary to ascend above the snow-line in order to establish batteries secure against plunging fire. "All this frontier," he wrote, "is of such irregular contour that I have had to devise a new system of fortification to take advantage of it." He blinded his works; bastioned towers, walls, creeping embrasures, he regarded them as cover beneath which to shelter his guns. There was no detail which he did not provide for, and he quickly turned himself into a mining engineer.

"I have already had the honour of informing you that without the help of coal it would have been difficult to carry out these plans without causing ruin to the woods of the district, which would have entailed the ruin of the inhabitants. I know that it must certainly exist in several places in these mountains. I have had it sought for and have even spent money on this and promised slight rewards to those who find good coal. It has been found in several places, particularly at Entrevaux, in a place called Briançonnette, and also at another place, very good and burning capitally; I have

tried it. It will be of great assistance for making lime, and for warming the garrison and the citizens."

What a great work was thus begun, and at what a late hour! Vauban inveighed against those improvident men who had carried war into distant countries without even taking care to secure their own gates.

"If, instead of chasing butterflies beyond the Alps, they had taken care to defend this frontier properly, we should have been secure now, and the King's mind would be at rest; instead of which two or three years of anxiety lie before you."

"Chasing butterflies!" I think he invented the phrase; he was fond of it and often made use of it; for this builder of walls did not love those giddy soldiers who amused themselves by the display of their colours in distant adventure.

"True glory," he remarked one day, "does not flutter like a butterfly; it can only be achieved by real and tangible actions. It must always fulfil its duties to the letter. Its first and true principle is truth, to which it is particularly attached. It is wholly generous, prudent, venturesome in enterprise, firm in resolution, intrepid in perilous undertakings, charitable, disinterested, and always ready to forgive and to uphold the cause of justice. Always logical in its actions and governed by reason alone. Uncomplaining in adversity, humble and affable in prosperity, it makes up its mind judiciously and maintains its opinion when once formed in

the face of all that may happen. It has religion, it is humble and modeſt in all it does and cannot even suſtain praise without blushing. If I miſtake not, this portrait is not incorrect, but it is but slightly regarded among men.

"False glory is only the mere appearance of these qualities. In practice the two are always opposed. False glory is the true crow of Æsop, which decks itself in the feathers of others. It is, however, the only kind in fashion throughout the world. The other would make true heroes, but it coſts too much."

The King had given inſtructions that not a shovelful of earth was to be moved in France without Vauban's consent. From every hand he was written to, and his advice awaited. A canal was to be built at the mouth of the Rhone ; Vauban muſt lay it out. Vauban knew the scheme, he had himself devised it six years before, during peace-time. But then he was on the spot and worked with complete knowledge. What advice could he give from the mountain-tops of Savoy ? He replied for all that, and gave certain wise inſtructions ; this canal muſt extend from Arles to Port-en-Bouc ; water could be obtained from the Craponne ; the bottom was to be kept at the higheſt possible level ; above all, added Vauban, nothing muſt be embarked upon without his advice, "for there is no work in which it is so easy to go wrong as this."

Vauban's energy was enormous ; but it was

strained to its limits. He was at one and the same time foot-soldier, artilleryman, architect, overseer, manufacturer of powder and saltpetre, mining engineer, builder of bridges and highways, hydrographer and surveyor,(33) tactician and strategist, organizer of armies. He practised ten professions which are now distinct and separate. It was a great gage that he held, and he lamented it, for having so much to do he was compelled to abandon the hope of bringing his many enterprises to that perfection which he loved.

"Engineering is a trade beyond our power," he wrote. "It includes too many things for one man to be able to possess it to perfection; I have a sufficiently good opinion of myself to believe myself one of the ablest of the profession and capable of instructing the cleverest, but even so, when I consider my own powers, I find myself to be but half an engineer, after forty years of continuous labour and the greatest experience any man ever had."

Vauban could surely speak thus without conceit; he had built more than a hundred fortresses and conducted more than forty sieges; but the slightest expression of vanity was so contrary to his nature that he recalled his words at once and corrected them. He remembered those gallant friends of his of whom more than one had perhaps greater gifts than himself and who had fallen in battle. His experience was due less to his own merits than to the favourable direction of Providence. "Glory,"

he added, "is His who has preserved me and enabled me to live until now."

So far as Vauban could go, he went; painfully, panting, coughing, unable to sleep, he climbed as high as the snow would allow him. "I can testify," he wrote, "that I have had no rest since my recovery from my severe illness." An obstinate cold stopped his progress at length, and for a fortnight he was chained to his bed in a Savoy village.

Yet another mission. It was learnt that the English were equipping a fleet and getting together an expeditionary force for the purpose of seizing and burning one of the French arsenals. Brest was no doubt their objective. The King sent Vauban there.

"I leave it to your discretion," he wrote, "to place troops wherever you think advisable, either to prevent the raid, or in the event of the enemy besieging the place. The responsibility with which I entrust you is one of the most important from the point of view of the good of my service and of my Kingdom, and for this reason I do not doubt that you will be pleased that I have entrusted it to you, and will give me signs of your zeal and capabilities as you do on every occasion."

Vauban crossed France. Over sixty and Lieutenant-General of the King (soon to be a Marshal it was said, and rightly so; the delay hurt and annoyed him slightly), Vauban no longer entrusted himself to relays of horses. He travelled in a

post-chaise of his own invention, larger than an ordinary chaise, and carried on four stretchers by two mules, one in front and one behind. It had no wheels, no contact with the ground ; so that jolts were avoided (they were severe on the roads in those days) and Vauban, shut up with his papers, could work during his long journeys. I do not imagine that he was always shut up. Observant of everything, with a sharp eye Vauban watched the countryside. Tottering cottages, muddy tracks, silted up rivers, these were sad sights. The whole of France required reconstruction. Vauban perceived it and stage by stage he estimated the ruin of his country. But he was never pessimistic, and he was just as quick to notice favourable as unfavourable signs. Whenever he had an occasion for approval, he seized it. Not only did he rejoice, but he expressed his satisfaction, and thanked the unknown people who had by their intelligent efforts caused him this pleasure. " I know of a provincial inspector with whom he was acquainted," wrote Fontenelle in his Eulogy, " to whom he wrote thanking him for a new and useful institution which he had seen while travelling through his district. He became the personal debtor of whoever had contributed to the public weal."

Vauban meditated upon the poverty of the country. Doubtless the war was the cause of it ; war makes demands that cannot be disputed, it claims men and goods that cannot be denied it ; but Vauban refused to resign himself to this poverty

which was declared to be inevitable. He asked himself what was the good of arming the frontiers if the interior was eaten away? If the people must be sacrificed in order to achieve victory, what was the use of that victory? From the moment of that sacrifice victory itself was vain and impermanent, a mere will-o'-the-wisp. Could not this sacrifice of the people be avoided? Vauban believed it could, and never despaired; his nature was incapable of despair, and he was convinced that a remedy existed for every evil. Intelligence should discover the remedy, and energy should apply it. If only he had had his life still to give, if he had but his youth once more, to continue the work of Colbert as he had that of Louvois, and improve the lot of the people whom he loved as a father! Age had come to him, but his heart was unwrinkled. The whole kingdom required making or remaking; Vauban dreamed of this stupendous task.

His work in Brittany took him two years, and he observed that wild province at close quarters. He raised a militia, distributed the King's uniform among barbarous and half-clad peasants, who spoke an unknown tongue and doubtless differed little from their ancestors who had fought with Cæsar. He studied the situation; every branch of the service was put under his charge. The Navy, something quite new to him, that he had never seen and which had never seen him, obeyed this landsman. "It does for me," he wrote, "what it has never done

for others ; for it is proud and fastidious, and always prejudiced against orders from the shore."

He planned his defence and distributed his forces accordingly, and his plans were correct. The English fleet arrived, disembarked its troops in the very places where he expected them, on the beach of Camaret. Vauban caught them between his fires, mowed down five hundred men and captured the survivors. A frigate, pierced by cannon-shot, ran ashore on the sands, and Vauban captured her as well. The English, realizing the presence of a master, went away and did not return.

The prisoners reported that two leaders had fallen in the engagement ; one called Tramach, the other La Motte. Vauban wished to know who this La Motte was. " La Motte was a refugee," they told him, " a French Protestant, an engineer who had served in the King's armies. . . ." It was then his old colleague and friend ; when Goulon had given up his post of *capitaine-major*, La Motte had succeeded him and served with distinction. Then he had disappeared. A note of Louvois' written on September 24, 1689, had warned Vauban.

" The King has been informed that M. La Motte, captain of miners, after having rendered excellent service at the siege of Mainz, took it into his head to say, as he left, that his conscience would no longer permit him to serve without complying with the demands of his former religion."

Vauban had met him once more fallen on the shores of his native land beneath his own fire, a sad death-blow to receive and to give.

At the end of 1695, Vauban returned to Bazoches. He found his home emptier than he had left it. Marriage and death had reduced the family circle which had gathered beneath his roof. Charlotte Le Prestre de Vauban, his sister, and Louise, his niece, had both disappeared about 1680, having no doubt married. His two daughters, Charlotte and Jeanne-Françoise, were both married, and his niece Jeanne, who had lived with him, died at the age of twenty-two. But, on the other hand, there had been new arrivals ; Louise Le Prestre, the daughter of Jacques, a cousin of Vauban's, who had come to live with him in 1693 on the death of her husband. His heavy and ill-formed handwriting is found four times in the parish registers. Paul Le Prestre, at one time second-in-command of the citadel of Lille, who had retired after a long period of service ; his cousin Millereau, a former *Procureur du Roi*, also retired ; Phibert Bertrand the chaplain of the château, all died at Bazoches. The parish registers enclose these old stories and divulge them to those who care to seek.

Vauban welcomed all his family, and, it would appear, devoted little time to mourning. That great expanse of peaceful countryside, dominated by the heights and monasteries of Vézelay, did not invite repose, but fresh work. Vauban was hence-

forth occupied in the consideration of the poverty of the Kingdom, and ideas for the necessary reform of its fiscal organization. We might even say that he was obsessed by this subject, for he was one of those whom age stimulates rather than subdues. Besides, Vauban was not alone in these ideas. In 1695, the King had imposed a tax known as *capitation*, payable by all without exception according to their income. Vauban had at the time written a Memorandum advising the levying of such a tax. But the *capitation* of 1695 was only a war-time expedient. The King had undertaken that it would be discontinued at the end of the war. Now Vauban wished it to be a permanent reform.

"The direct taxation of this country (*taille*) has become so corrupted," he wrote in his Memorandum of 1695, "that the angels of heaven could not find a means of rectifying it or preventing the poor from being always oppressed, without the intervention of God." Vauban desired that this system should be replaced by a definite tax, proportioned to a man's income, levied by agents of the King himself and not by the agents of the tax-farming banks. Now one condition of such a reform was an exact knowledge of the wealth of the country. This knowledge was lacking. During the forty years which Vauban had spent in travelling through the country and observing it, it had often struck him that it was odd that the King should know the exact number of his soldiers, his guns, his pictures or his statues, while he remained ignorant of the

number of his subjects and the state of their possessions, the extent of their meadows and arable land, the number of their cattle. It was nobody's business to undertake this lowly computation. "Men have a horror of facts" as Prudhon once sadly observed; "speak to them of dreams, they will follow you, talk to them of economy, they will fly from you." "The Republic will be queen if she practises economy!" he said in his lively way to his friends the Utopian republicans of 1848. These words remain always true and always applicable. Sully had spoken them to Henri IV, and Henri IV had listened; Colbert had impressed them on Louis XIV, and Louis XIV had often understood. Vauban uttered them once more; "the Monarchy will be powerful if it knows how to practise economy." Already, by Colbert's order, the inspectors had begun to collect detailed accounts of their districts. At Colbert's death the work had lapsed. Vauban employed himself in resuming it in his native district. He wished to make an estimate of its wealth, he wished to determine, by experiment within a definite area, the best statistical methods and to compile a Memorandum which would serve as an example as well as an incentive. All that Vauban undertook he accomplished; his "Geographical Description of the Electorate of Vézelay, containing its revenues, its qualities, the customs of its inhabitants, their poverty and wealth, the fertility of the district and the measures that may be taken to improve its barrenness and achieve the

increase of its population and its greater prosperity," is a model which was to remain for long unequalled. It was the earliest of those monographs which science employs to-day. From Vauban to Le Play,(34) a hundred years were devoted to abstract and systematic considerations.

Having thus employed his leisure to advantage, Vauban left Bazoches.

The armies were still assembled in Flanders. They were much weakened, and their leaders, avoiding battle, sought to employ the remnants of their forces in siege-warfare.

In 1695, the Allies assembled a formidable force of artillery in front of Namur, and destroyed with their fire the town already half demolished by the French guns. Cohoern directed the assault, and Namur surrendered. The comparison of the two sieges, that of 1692 under Vauban and of 1695 under Cohoern (35) occupied military appreciations and European writers for a long time. Vauban had taken Namur when Cohoern was defending it ; Cohoern had recaptured it when Vauban was not there. Vauban had taken Namur in thirty-five days, and Cohoern in sixty. In 1693 the attackers had had 2,600 men killed and wounded and the defence nearly double that number; in 1695 the proportion had been changed, the attackers had suffered twice the losses of the defence, the garrison having eight thousand and the Allies eighteen to twenty thousand casualties. Cohoern

had arranged his attacks without science or precaution, he had counted on the effects of surprise and of masses, massed fire and massed assaulting columns. Vauban on the contrary had consistently shown the qualities of his genius, "employing only the necessary amount of artillery" as Colonel Allent wrote, "and using his influence to modify the ardour of his men, only allowing them to advance within the protection of his works and thus bringing them under cover as far as the foot of each line of defence. He had devoted his skill and his reputation to sparing them; Cohoern, massing his guns, sending his columns across the open towards distant objectives, and sacrificing everything to his desire to shorten the siege, by terrifying or surprising the defenders, had economized neither cost, men, nor even time. Vauban had hemmed in, confined, intercepted, divided the defenders; Cohoern had devoted his energies to overwhelming them. It was brute force substituted for industry, or rather industry employed in the multiplication of engines of destruction. It will be seen that the former behaved as a skilful leader who knows the value of manœuvre, the latter as an impetuous man who thinks only of breaking and destroying the enemy. In Cohoern's attacks, missile weapons, boldness and co-ordination of assault dazed the mind; in Vauban's operation we admire a method at the same time more certain, more rapid and less bloody; in a word, the art of destruction restrained and perfected by the art of conservation."

There were consolations, even for the loss of Namur and the unfavourable situation. Louis XIV was able to put matters right by a sudden diplomatic measure. On August 29, 1696, he made a separate peace with the Duke of Savoy, one of the Allies. He paid dearly for it, surrendering Casale, Pignerol and all his rallying-points on the Italian slopes of the Alps. At this cost he disorganized the coalition, secured one of his frontiers and freed one of his armies.

These restitutions seemed bitter, and Paris was full of melancholy rumours. This unfavourable separate peace was the forerunner of a general peace which would be still more disadvantageous ; the King would give up everything, surrender his fortresses. . . . The impetuous Vauban heard these rumours and was disturbed by them. Could it be true that the King would permit the dismantling of this barrier three hundred leagues in extent, which was all his own work ? Vauban's pen was as ready as his mind, and he dared to write a political letter, a rare thing at this period, and addressed it to Racine.(36)

" I had scarcely arrived before I discovered that Paris was full of rumours of peace spread by the Foreign Ministers, on terms very dishonourable to us ; for, among other things, they write that we have offered as a last resort Strasbourg and Luxembourg, in the condition that they are now, in addition to the offers which we have already made ; that it is not doubted that this offer will be accepted ;

but that people are astonished that it was not made two years ago, because had it been so then, we should have had peace. If this is true, we might as well give the enemy our stirrup-leathers. A bridge across the Rhine and a fortress of the strength and importance of Strasbourg, which of itself is worth more than the rest of Alsace, involves giving the Germans the best and safest depot in Europe for the support of the Duke of Lorraine and for carrying the war into France. Luxembourg for its part would produce the same effect in Lorraine, Champagne, and the Three Bishoprics.(37) After that, we can only play at opposing the Duke of Lorraine ; for he will be able to secure such support as he requires.

"I will not speak of the other fortresses which we are to give up. I must have seemed too outspoken to you already ; and I had better hold my tongue lest I say too much. What is quite certain is that those who have advised the King in this sense are doing no disservice to our enemies, for these two last-mentioned places are the best in Europe, and only require defending ; and it is certain that no power would have been able to drive us out of them. With them we lose for ever the chance of making the Rhine our frontier, for we shall never return there. So, after having ruined herself and expended a million men for her enlargement and the establishment of her frontiers, when everything has been done and only a little patience is necessary to issue triumphantly from the business,

France falls all at once without the least necessity, and all that has been done in the last forty years will only result in giving to her enemies the means of assuring her downfall. What will be said of us in the future? What reputation shall we have abroad, and to what slights do we not expose ourselves? Is the King's council so ignorant as not to know that States maintain themselves more by reputation than by force? If once we lose it, we shall become objects of contempt to our neighbours, as we are objects of their hate. They will walk over our body and we shall not dare complain. See what we have come to! I tell you that there will not be a petty prince throughout the whole of Europe, who, a year hence, will not compare himself with the King, who, for his part, can be assured that the peace will last no longer than the time the enemy requires to refurnish himself, after he shall have made peace with the Turk. We give too much to the Emperor to hope that he will not avail himself of it. As to the conditions under which they promise us a general peace, I think them more infamous than those of Cateau-Cambrésis which shamed Henri II, and which has always been considered as the most dishonourable ever made.(38) If we had lost five or six battles in succession and a large area of our territories, if the State were in imminent danger, which could not be averted except by peace, there would still be reason to complain of a peace such as that now contemplated. But there is no question of any such thing, and we

are still in an excellent position. We have captured much ground from the enemy, we have taken great and fair fortresses from him, we have always beaten him, we live every year at his expense, we are in a much better state than at the beginning of the war, and at the end of all that we make a peace shameful to the King and the whole nation. I have no means of explaining such extraordinary behaviour, and if I had I would take good care not to declare them in a letter like this. Burn this one, if you please."

"*September* 13, 1696."

A circumstance even more astonishing than the letter itself is that Racine did not burn it but put it among his papers. There was a deep sympathy of heart and mind between these old men who possessed their memories of 1660 in common.

Vauban was too easily alarmed ; the King decided on a fresh effort. Vauban was consulted, and advised the siege of Ath in Flanders. His advice was taken. The King confided the works to him and the army to Catinat. This double choice was a good one. The two men, Frenchmen of the same birth, considerate and wise, who had been friends for many years, seemed destined to work together.

Vauban "knew his Ath by heart," for thirty years he had made war in its vicinity. In 1670 he had taken the place and fortified it in his own style,

In 1673, the King having restored it to the Spaniards, Vauban had orders to destroy his own work. "Above all," Louvois had written, "carry out the work in such a way that it cannot be said that the King has ordered you to do it." Vauban evaded the order, either because perfidy was distasteful to him or, as Colonel de Rochas acutely observes, "by the instinct of an engineer annoyed at the useless destruction of fine works." (39)

"What I have done for the best," he replied to the Minister, "is to reconnoitre the spots by which we can make our re-entry into these places, by making good plans and schemes for this attack, which if they be carefully followed some day, will be half the work done, and will lead us safely to their capture. For this reason you shall have full copies when they are made, but they must be regarded as the apple of one's eye and like an inestimable treasure."

The time for their use had come. Vauban studied his former plans, concerted his attacks, and decided to put into practice a method of fire which he had been meditating for a long time, for twenty-five years perhaps. What a fine period of a man's life is old age, perhaps the finest of all, when to undiminished energy is added a long experience! "I have dreamed so much of the use to which mortars should be put in the attack and defence of fortresses," he had written as early as 1672, "that I am on the track of an excellent scheme for it. In a word, I am so full of it that I cannot sleep." In

1697 it was no longer a dream that he pursued, but a method which he possessed ; he put it into practice and broke down the defences of Ath. He disposed his batteries so as to enfilade the enemy's trenches.(40) He loaded his mortars with reduced and carefully calculated charges and fired them. The shot hit the ground without penetrating, and ricochetted once, twice, or even three times, killing men throughout its flight. Would this slow and dull measure, silent in its effects, commend itself, would it be relied upon ? From many leaders Vauban had experienced obstinate resistance to it. Catinat, on the contrary, understood it and supported it with his authority. The control of it was complicated, and Vauban supervised everything himself. He exposed himself and was hit by a musket-ball.

" My wound," he wrote, " is on the whole nothing but a bruise, in truth somewhat extensive and in a bad place, but it is not sufficient to make me relax for an instant my duty to the King, the State, and myself ; on the contrary, with a cheerful and lively countenance I took great care to show myself next day in the trenches, and I saw with pleasure that everybody was delighted."

A few days later he wrote :

" Our affairs go on wonderfully ; up to now the enemy have done nothing which can be called advantageous to them, and I observe with delight that I know their fortress better than they do. It is also true, and I can say so without boasting, that

a place has never been attacked with so much art and speed combined. It is an excellent thing to know the enemy with whom one is engaged so well! I have thought of nothing but the study of the attack of this place ever since the King so much as mentioned the name of it to me, and I did well to make a new plan with all my notes on it when he gave it up to the enemy. We have them now gaping like fools; and if there were a thousand men in the place I should not be less concerned than I am at the number there are. If the devil were to assume material shape, I do not think that he could hold out in the place. I say even more, that if these fellows allow us to complete our bridges, they run great risk of capture at the first onset. All our trenches will be practically finished this evening, and it will only remain to put the finishing touches and to man them. . . ."

So he wrote on June 4. On the 6th:

"I only send you this note, Monsieur, that I may have the honour of telling you that immediately our advance works were on the point of completion, they accepted the situation so far as to hoist the white flag and to send hostages for capitulation. M. le Maréchal de Catinat and myself were at that time on the bridge-head, discussing the end of the undertaking. Some of their chief men came down through the breaches to speak to us. They were very much pleased with their defence, having regard, they said, to the horrible way in which they had been attacked, upon which we took

care to praise them well. And so Ath has surrendered."

The Allies made no attempt to save Ath or to retaliate for the blow they had received. France, wearied though she was, had triumphed over her enemies.

What emotion the patriots experienced when they learnt that the King was treating for peace and was prepared to accept unfavourable conditions! Was poverty then so pressing and was exhaustion so near? All the rumours of the previous year sprang up again. Vauban was so indignant that he wrote to the King. His letter is lost, but we have the Royal reply, which is dignified, prudent, and vague:

"*August* 22, 1697.

"I am entirely of your opinion, and I shall do that which I believe to be for my own good, for that of my kingdom and my subjects; they may trust to me who know and understand the state in which we are. If peace is made it will be honourable to the nation; if the war continues we are in a condition to carry it on well on all sides."

The King had in truth secret motives; on the one hand the emptiness of the Treasury which his Ministers and himself were alone aware of; on the other hand the consideration of the grave crisis into which Europe would be plunged by the impending death of the old King of Spain. This

death, were it to take place in the midst of war, would have complicated the situation in a manner at once inextricable and wholly to the disadvantage of France. Louis XIV had need of peace in order to study events, to make preparations and secure allies before negotiating the partition of that Empire which included America, Flanders, and Italy.

On October 30, peace was signed, on better terms than at one time could have been hoped for.(41) Strasbourg was retained, but Louis XIV surrendered Vieux-Brisach, Fribourg, Kehl, the towns of the Palatinate, and (a severe loss, deeply felt by Vauban) Luxembourg, that padlock which the gate of Lorraine had always lacked, and which it still lacks to-day. In Catalonia as in the Rhineland, the treaty provided for retrocessions and dismantlings. The fortress of Mont-Royal, the advanced French outpost on the Meuse, one of the principal works of Vauban, a military colony built in four years with its mills, granaries, and church, was to be destroyed by the French soldiers themselves.

FRANCE had lost her proper shape, and her frontier stood dismantled. Its re-establishment was urgent. Few believed in the duration of this peace, urged by fear and the expectation of an unknown convulsion. Vauban took to the road once more.

"In 1698, by the instructions of the King, he made a new scheme for Brisach, on a new system, which is one of the finest and best fortresses in Europe, and inspected the others on the frontier, from Basle as far as Lille in Flanders.

"In 1699, the King ordered him to continue his inspection of the frontier fortresses, which he did by beginning at Lille where he had broken off the year before, and continuing along the sea coast to St. Malo, preparing schemes for all the coast fortresses, in order to make good the damage of the late wars.

"In 1700, he continued by the order of the King his inspection of the said frontiers, with the intention of completing the entire circuit of France, and began with the fortresses of Dauphiné and Upper Provence, which he followed by the inspection of the sea coasts from the Var to Marseilles, upon the schemes for which he worked much."

Coughing, grumbling, sleeping badly in his litter, the grand old man saw and provided for everything. In place of the broken front he built a new one, and designed it in such a way

that it could serve for the enrichment of the ruined country as well as for the defence of the threatened provinces. This is the peculiar attribute, the marvellous merit of this work. Peace and war, being bound together by the nature of things, Vauban combined them without effort in his grand calculations and buildings. He knew, as we have seen already, that the same equipment required in time of peace is suitable for the purposes of war, that the same things are required in battle as are required in workshops ; a canal, for instance, which served the needs of commerce, could be utilized for the supply of armies and might some day be as good as a defended place. Vauban never forgot this. On the Alsatian front, the left bank was all that remained to France, and it was the one which must be defended. Vauban laid out a canal which, running parallel to the disputed stream of the river, might carry troops and munitions so that neither the enemy's guns nor the fluctuations of water-level could interfere with their movements. And this same canal could carry commodities and serve many useful ends ; its traffic could ensure prosperity as well as armed force, the warlike sign of prosperity.

Never had Vauban's mind been more fertile in expedients, never more ingenious in carrying them out. He had science, together with the skill of an old artisan accustomed to every trick of his trade. His hand worked upon the soil

of France as the graver of the aged Rembrandt upon copper ; his hand was sure, and whatever it undertook it brought to a successful conclusion. He arrived in Gascony, and repeated his Dunkirk undertaking. The sands which obstructed the estuary of the Adour interfered with trade, and the engineers of the province did not know how to deal with it. Vauban stopped in his progress, investigated the matter, sounded, studied the currents, and made a plan for a wall which, training the waters of the river, should direct them over the sand and scour it away. His advice was taken and his plan carried out. The water made its channel, and the Adour was open. In Languedoc another problem awaited him. It was proposed to join the north and south of France by a canal, and the route was under discussion. Vauban, the master architect of the prosperity of the country, was called in and consulted. He knew the contour of France as a farmer does the slopes of his fields, and he laid out among the hills a waterway which a barge could follow from Nîmes to Dunkirk without unloading.

His expedients were never failing, and he seemed never to repeat himself. An attempt has been made to analyse his systems of fortification, and three main types have been distinguished.(42) Men whose delight it is to number on their fingers the ideas of great men have agreed on this number. As a matter of fact, Vauban had not three, or two, or one system. Instead of a

system, he had a method, and this method he followed with a growing knowledge. It was to know his ground, to investigate it and understand it, and then to model upon it the trace of his works. The bastioned towers which he built at Brisach are an example of river fortification ; he devised it for Brisach and did not reproduce it. In the Ardennes, behind Luxembourg where it was necessary to cover the loss of this city, he built the most famous of his works. On a group of rounded hills, not very formidable in appearance, he laid out bastions and disposed batteries with so intimate a knowledge of the ground, that an energetic defender could entrench himself there for a prolonged resistance, or a great army concentrate itself there to await its chance. Up to the time of the Napoleonic wars this trench system built on undulating ground, the crown-works of Haurs, as it was called, was cited as a masterpiece of the art of fortification.

This great undertaking did not absorb Vauban's powers. A master of his art, he employed it at his will. His mind held and weighed unceasingly an enormous experience, and worked upon it. His horizons widened and his tasks grew ; the work and the worker kept pace with one another. Vauban remained always the same builder. At sixteen, a brave soldier and horseman, his vocation was settled ; he would deal with earth and stones and water, would calculate weights

and forces, apply the whole, and build. After forty-five years, we see a man with bent shoulders and white hair, but he has not lost his powers. The same activity which we knew before still actuated his thoughts and his wishes ; he was still anxious to organize, to build, to leave behind him a France better protected than he had found her. But his widened experience compelled him to take an interest in things which in his youth he had ignored. He remained absorbed in earth, stones, and water ; but they no longer claimed the whole of his attention. Human attributes were now the object of his profound study. He desired the strength of the family, whether peasant, citizen, or noble ; he sought to proportion taxes to income, to reconstitute and ameliorate the condition of the exhausted kingdom. His instinct, his mind, and his heart inclined him to this work, and his birth was perhaps the determining factor, that Burgundian descent which had given to France in the Middle Ages her best architects, her abbots of Cluny who founded orders, to France as a kingdom her most profound jurists, and Bossuet to the Church. What is a kingdom, and what is at bottom the material of which it is made ? Vauban became aware of a truth, indeed the simplest and not the least known, but certainly the most neglected, that the true substance of a kingdom and its prosperty lies in the people who inhabit it, and that the power of Kings rests ultimately upon the vigour and

affection of their subjects, whom Kings must protect as well as rule.

We may remember those words written in 1693: "The true wealth of Kings," wrote Vauban then, "lies in the number of their subjects united and well disposed, *and these must be considered.*" The whole origin, the whole substance of Vauban's political creed is there. Men must be considered, and he considered them unceasingly. If others had deigned to do so, would France have been compelled to sign that peace which to Vauban was always a humiliation and a wound? Vauban did not believe so. He knew that France was weakened, not for lack of valour but for lack of resources, and that the richest country in Europe need not have failed had she been better managed. From that time a new idea obsessed him. He carried out his old duties with affection and ardour, as he did everything. But he knew that engineers and soldiers might toil in vain, their efforts were purposeless, that France was heading towards ruin unless her administration was reformed.

We are now far from the years when each one bore, as it did its flowers and fruits, its pleasures, beauties, dazzling enterprises, victories and conquests. Is this old man whose anxieties we witness the same Vauban who made war under Condé and Turenne, and who took cities under the eyes of the young Louis? Everything had changed, applause had ceased, to give place to murmurs, and Massilon in his *Carême* has described for us

an old King on his knees and in tears for the sufferings of his people. The Protestant refugees in Holland printed their lampoons, and in spite of the efforts of the King's agents, these lampoons reached Paris, carried and passed from one to another by a thousand hands. Vauban read them, and the police knew it and tried in vain to interfere with his reading. "What you have to do to comply with the intentions of the King," runs one of the orders of the Lieutenant-General of Police (May 22, 1697), "is to try to stop the books which M. de Vauban's secretary appears to be importing." At the Court itself parties were formed. Fénelon, [43] aristocrat and mystic, found listeners; he inspired vast and secret schemes, and directed dissension.

What was Vauban's place in this dissension? He knew of it and was occasionally interested in what was projected. When, for example, the followers of Fénelon who surrounded the Duke of Burgundy, the heir to the throne, undertook for the information of the prince an inquiry on the provinces of France, the conditions of their trade, their lands, and their people, Vauban knew and approved of the undertaking and aided it with his advice. Hue de Caligny, an engineer, was charged with the description of Flanders; Vauban wrote him a Memorandum on the best statistical methods, and encouraged him in every way.

"I have found the first enumeration of Dun-

kirk, which is very good and well carried out according to streets ; there is even at the end an enumeration of all the classes of the people which is a pleasure to read and see, all the arts and trades which are found in that town. . . . I beg of you to work when you can at the completion of this work. Spend a hundred pistoles or two hundred crowns upon it, I will send them to you immediately."

Vauban loved giving. His contemporaries bear witness to it, but he made little of it, and these words are the only evidence which remains to us of his generosity. It was doubtless a good opportunity for spending money ; it was a precious thought to Vauban that a prince was now growing up who would know the lowly details of his country.

However, in spite of the fortunate occasions when he worked with them, Vauban was not a follower of Fénelon, and did not enter their ranks. For this, among many more important reasons, one rather trivial reason occurs to me as worth mentioning. The two chiefs of the Fénelon party, the Dukes de Beauvilliers and de Chevreuse, were relations of Colbert ; Seignelai, the son of Colbert, was a follower of Fénelon, and this profession had been one of the masks under which the enemies of Louvois had hidden their designs. Now, as we know, Vauban, at first through an accidental quarrel, and subsequently through his duties, had worked throughout his life under

Louvois. For more than thirty years he had toiled at the side of this man who had been feared even by the King ; he had kept none of his thoughts from him, had never concealed the truth, had been his friend and the enemy of his enemies. Vauban had a long memory and an inviolable friendship, and it would seem that a lasting grudge against Colbert and his followers strengthened his faithfulness to Louvois.

Having considered this lesser reason, we may pass to the greater ones. Between these two classes of men, so well represented by Vauban and Fénelon, there is a great gulf fixed. Fénelon was a grand seigneur who served the King as a feudatory, that is to say not without reserve, and who abated none of his own privileges. Vauban had not a feudal mind, his devotion was to the State, and he loved the King as the incarnation of the State ; he willingly appreciated birth, but he also appreciated ability. Fénelon was a mystic, and capable of harshness ; Vauban was a Burgundian, alien to mysticism, and tender-hearted. The followers of Fénelon indulged in a pious dream, into which intruded, among the traditions of feudal society, the first manifestations of our humanitarian and liberal ideas. Vauban was not of their school, and if it can be said that the eighteenth century had already begun, it must be added that Vauban was not of that century. The followers of Fénelon were young men, they knew it and boasted of it ; Vauban was an old man,

the most faithful and immovable of old men. That was his pride. He remained until his last days a Frenchman of 1660. The great years had left their mark upon him, and he kept and desired to keep the manner of the greatest generation which the French race has produced.

If there were points in which he differed from the men of 1660, it was rather in the direction of an older fashion than a newer. It is not to Turgot, an abstract reasoner, that he must be likened so much as to Sully, the man of gentle birth who watched over the King's domains as over his own estates. The *Oisivetés* of Vauban (this was the word which he put as the title of his essays, of his collection of writings) does not in the least resemble a work of the eighteenth century, but is very similar to those of the sixteenth or early seventeenth century, as for example Sully's *Economies loyales et Royales*. Nothing in them foreshadows the ideological frenzy which the century then beginning delighted in. Vauban did not dream. He was tormented neither by the idea of insatiable beauty as men were at Versailles, nor by that equality which fashion was introducing into the Parisian salons. His thoughts and his meditations were concerned with hard work, moderation and sanity.

This difference in his genius which separated him from the men of his time has been perceived but not defined, and this has led to considerable errors. I quote a few lines from one of his most

recent biographers, M. Georges Michel, which are almost perfectly inexact. "A man of the *ancien régime* by name, surroundings, and friendships, a man of authority in his profession, Vauban showed rare courage in freeing himself from the prejudices of his time, and a truly extraordinary genius for explaining and formulating conditions of existence and the development of modern society. . . . His memory will be eternally venerated by all good citizens who, while deploring the excesses of an unhappy period, welcome in the admirable manifestation of 1789 the dawn of our liberties." This phrase expresses with remarkable precision the widely spread errors which mask the true features of Vauban. Vauban was scarcely noble ; the marriages of his family were middle class ; he lived surrounded by contractors and engineers, being himself an engineer far more than a soldier (Spanheim, in his *Relation*, styles him "Inspector Vauban") ; his ideas were those of Sully or of Colbert ; he had not an extraordinary genius, but a powerful judgment, healthy and inspired by his heart ; he in no sense foresaw modern society, with its parliaments and its debates ; and the good citizens who "while deploring the excesses of an unhappy period, welcome in the admirable manifestation of 1789 the dawn of our liberties," run the risk of not understanding a Frenchman of Old France like Sebastian Le Prestre de Vauban, Engineer of the King and Marshal of France.

He was compassionate ; but was compassion the privilege and the invention of the eighteenth century ? He visited the prisons and interested himself in the prisoners ; did not St. Vincent de Paul do the same ? He was good, with an active and constant goodness ; did Bossuet introduce the eighteenth century when he said that God first put goodness in the heart of man ? Let us not distort Vauban, let us see him as he was, a man of his time, a subject of a great King, his most zealous and faithful servant.

An immense longing possessed him. That work which his friends and himself conceived and began together ; that building of a new France, inviolable as to its frontiers, indestructible as to its base, what had become of it ? The old crew had gone ; Vauban and the King remained alone. This feeling of loneliness, although it caused him sadness, increased his ardour ; the survivors were responsible, the fate of the whole work rested on their shoulders. What had they done, these Frenchmen of 1660 ? A work of which without doubt they could be proud. But Vauban, with all his experience and energy, Vauban who strove in everything to reach perfection, was incapable of complacency in his pride. The work once finished, no longer intrigued him ; he only regarded it still for the purpose of pointing out its deficiencies and its faults. "Monseigneur," he wrote to Louvois in 1671, "endeavour to give the lie to those who say that Frenchmen

begin everything and bring nothing to a conclusion." Such was Vauban, the man of great schemes and of great achievements. The only work which attracted him was the work which had yet to be done and which cried aloud for the workman.

What had they striven for, these great Ministers of which he was the last? A France united, devoted, strong; productive of corn, meat and wine, breeding large families, generous in her people, glorious in her leaders, and entrenched against her enemies by the three seas, the mountains and the Rhine. And what did Vauban behold at the age of seventy? About the King, who was soon to die, a diminished nobility and a hungry people; on the half-destroyed frontiers, insolent and armed enemies. Vauban believed that he knew the reason of these misfortunes; the kingdom was in danger because its people were poor. The soil was rich, hands worked hard and hearts beat high; the wide fields of France produced wealth in abundance, and were capable of ensuring the respect of Europe. But financial matters were badly administered. The working classes were oppressed without good cause. That was the evil that compromised the present and threatened the future; which might some day overturn the monarchy and the country itself. Vauban was too zealous a servant to hold his peace; what he knew he must give expression to. He took up his pen and composed a memo-

randum for the King. This memorandum was the *Dixme Royale*.

In June, 1700, the work was finished. Vauban informed the Marquis de Torcy (44) in a letter full of the enthusiasm of a man set free :

"For a long time I have been obsessed by a folly over which I have often meditated without the intention of curing myself of it ; not being any longer able to resist the temptation, I succumbed to it. . . . This folly, of which I am both father and godfather, is called 'A proposal for the conversion of the *taille*, the *aides*, and the provincial customs, *capitation*, special levies, octrois, commissions, gaugings, and several other duties onerous and mostly arbitrary, into a Royal Tithe, apportioned from time to time to the necessities of the State, which would be imposed upon all who have an income in the kingdom of any kind whatever, without distinction of small or great, not even those in the King's service, so that the Ambassador of France in the worshipful Cantons should pay the tithe upon his good wines, his salary and pensions, in the same way as M. de Vauban and all other people of the same sort, even the servants of the kingdom from the lowest scullion to the captain of the King's guards, even the King and all the Princes . . . by which means the State, sick and languishing though it be, would find itself in good condition again in a very short time.

"Incredulous as you are, Monsieur, you will doubtless laugh at my suggestion, and say 'Devil take the foolish fellow!' Call me foolish as much as you please, Monsieur. I have experienced such abuse and worse, but it has not prevented me from surviving it."

These financial ideas of Vauban have not the originality which has been ascribed to them. The suppression of fiscal privileges was one of the aims of Colbert's administration. It had been the desire of those great clerks of 1660 whose work Vauban continued, and it had begun to be realized in 1695 by the war tax known as *capitation*. The direct levying of the Royal taxes, without the interposition of revenue farmers and of brokerage, the other idea which Vauban recommended, was also an idea common to the administrators of the *Ancien Régime*. The struggle with the revenue-farmers, the "partisans," was the struggle of Sully, of Colbert, and the most popular of their endeavours. Vauban had not yet written the *Dixme Royale*, when Boisguillebert (45) published his *Détail de la France*, a bold and learned pamphlet aimed at the financiers. Vauban had read it, and profited by it, and several pages of the *Dixme* recall the *Détail*.

We may carry criticism a little farther. In the contribution of Vauban in this subject there is an item peculiar to him, and it is of little worth. The suggestion that he made, that tithes should

be levied by the King in kind on the kingdom like a priest on his parish, is absurd. What could the State have done with these accumulations of goods in kind? It would have had to adopt the trade of merchant, and States have never prospered in this rôle. At the time of each famine (and famines occurred frequently) its responsibility would have been terrible, and so would have been the outcry against it.

We may remark that these observations, however justified, ought not to diminish the reputation of Vauban. If the French have forgotten Basville and his tax, Boisguillebert and his pamphlet; if they have chosen to retain in their memory only Vauban and his *Dixme Royale*, a correct instinct has guided them. Basville, (46) when he suggested to the King the introduction of *capitation* for the duration of the war, merely did his duty. He did it very well, and it did him credit, but a purely professional credit only. Boisguillebert, a parliamentarian, an administrator and an historian, in writing his pamphlet, powerful but malevolent and spiteful in tone, confined himself to the scope of his duties and vented a bitter nature which does not evoke our kindly memory. On the other hand, the impulse which drove Vauban to the compilation of his memorandum was disinterested and altogether noble. He was not an administrator by profession like Basville, nor a publicist or jurist like Boisguillebert. As a loyal volunteer he served his King

and country; and between King and country the language of the seventeenth century did not know how to distinguish.

"I protest with the best possible faith that it was not a desire to better my condition, nor to secure further consideration, which induced me to undertake this work. I am neither a man of letters nor a financier, and it would have shown a lack of taste on my part to seek glory or advantage in matters which are not of my profession. But I am a Frenchman, with a strong love for my country, and very sensible of the bounty and kindness with which it has pleased the King to distinguish me for so long a time; a sensibility all the livelier because it is to him, after God, to whom I owe all the honour which has come to me through the employment which he has deigned to allot me, and through the benefits which I have so often received through his liberality. It is then the spirit of duty and thankfulness which animates me, and gives me a lively care for all that can affect him and the prosperity of his State. And as for a long time it has been my duty to return this obligation, I may say that it has given me cause to make an infinity of observations of all which could contribute to the safety of his kingdom, the increase of his glory and his revenues, and the happiness of his people, who should be dearer to him the better off they are, and the less they are in a state of want.

"The wandering life which I have led for forty

years and more has given me occasion to see and visit many times and in many ways the greater part of the provinces of this kingdom, sometimes alone with my servants and sometimes in the company of several engineers ; I have often had occasion to give scope to my reflections and to notice the good and bad things of the country ; to examine its state and its situation, together with those of its people, whose poverty, having often excited my compassion, has induced me to seek its cause."

He had formed a conviction and a wish : the wish of a Frenchman of sympathetic disposition who saw the suffering of the people, of a clear-sighted patriot who perceived the disease from which the State was perishing. This conviction, this desire, he felt he must convey to the King. And while Basville kept silence after the capitation tax was suspended in 1698, while Boisguillebert remained silent after the Chancellor had sent him into Auvergne for a few months to calm his ardour, Vauban, on the contrary, when he was told to be silent, died, and the bitterness of his powerlessness was to sadden his last breath.

This love for the people, devoid of all false sensitiveness and all utopianism, this true consideration for the welfare of the people, was never better expressed than in the last pages of Vauban's memorandum.

" I feel myself constrained by honour and conscience to represent to His Majesty that it has

seemed to me that at no time has enough regard been paid to the poorer classes, and that too little heed has been paid to them ; they are nevertheless the most ruined and most miserable class in the kingdom, although the most considerable in numbers and in the real and effective services which they render ; for it is they who support all the expense, who always have suffered most and who still do so ; and it is among them that is found the decrease of men to be met with in the kingdom.

" Again, it is the lower classes of the people who, by their work and commerce, and by the sums they pay to the King, enrich him and all his kingdom ; they it is who furnish all the soldiers and sailors for his armies on land and sea, besides a large number of officers, all the tradesmen and the junior officials of the judicature ; they it is who practise and provide the men for all the arts and trades, who carry out all the commerce and manufactures of the kingdom, who furnish all the labourers, vine dressers and agriculturists of the country, who tend the cattle, who sow and harvest the corn, who tend the vines and make the wine, and to sum up in a few words, it is they who carry out all the work, great and small, of the country and the towns.

" These are the functions of that part of the people, so useful and so despised, which has suffered so much, and which still suffers as I write this. One may hope that the institution of the

Royal tithe will repair all this in less than fifteen years, and restore the kingdom to a perfect abundance of men and goods; for when the people are not so oppressed, they will marry with greater freedom; they will clothe and feed themselves better; their children will be stronger and better brought up; they will take greater care of their own concerns; finally they will work with more energy and courage, as soon as they perceive that theirs will be the principal share of the profits which they can make. It is certain that the grandeur of kings is measured by the number of their subjects; in this is comprised their good, their happiness, their riches, their strength, their fortune, and all the consideration which they have in the world. One can imagine nothing better to be done for their service or their glory than to keep this maxim always before their eyes; it is impossible for them to give too much attention to the conversation and increase of this people which should be so dear to them."

Simple words, these, but pronounced with an accent which rings true to our own day.

Vauban read his words to the King, and the King listened to them. Vauban described his interview in the sequel of his letter to the Marquis de Torcy.

"I have submitted the system to the King and read it to him in the course of three evenings of two and a half hours each, with all possible earnest-

ness. His Majesty, after several questions and answers, applauded it. M. de Chamillart, to whom I gave a copy, has also read it, as well as M. le Premier President, to whom I showed it at full length. I have not been content with that. I recommend it to the King verbally, and suggested to him that he should try it in one of the small districts of the kingdom, which I repeated several times both to him and M. Chamillart. In short I ceased to speak of it to the King and his Minister, only to write to each a good long letter, in full detail, before leaving to come here, where, finding myself further removed from the disturbance and more at my leisure, I have again worked at it until to me, poor soul, it does not seem now too bad. This, Monsieur, is what has filled my spare time for the last six months, and has forced me to suspend the intercourse which we formerly had together, hoping that you will have enough indulgence for me to pardon me in favour of this poor system which might well become good were it employed, though I am prepared to wager against anyone that it will never be so. So I shall be justly punished for the time which I have wasted upon it. . . . Let us speak of other things."

Vauban had good reason to change the subject. He was enthusiastic, but he saw clearly and knew the slow course of events. Once out of the King's hands, his memorandum was handed over to the officials, with no Colbert to lead and

direct them. A district was chosen for a local experiment. Was it to be a genuine trial? It was perhaps a betrayal carefully arranged. Everything seemed to conspire against its success, and as Vauban had foreseen, the *Dixme* was condemned.

ALL the people of Europe feared war, and the diplomatists studied to avoid it. They had great difficulty. The King of Spain still clung to life, and the arrangement of the succession remained an insoluble problem. Who was to have the two Sicilies, the Duchy of Milan, the Flemish cities and Luxembourg, the New World? The question was discussed ceaselessly in every Court of Europe.

However, the Spanish nation, in sudden revolt against the insolence of these foreigners who proposed to partition it, insisted upon its dying King preventing the catastrophe by issuing an inviolable decree, naming to his subjects and to Europe the heir of his entire Imperial possessions. The King, yielding to the public demand, chose as his heir Philippe, Duke of Anjou, the grandson of Louis XIV.

Under these fresh circumstances, what course would Louis XIV pursue? If he accepted, it meant war. The Courts of Europe would certainly not consent to so great an increase in his power without a struggle. Did it mean peace if he refused? No, that merely renewed the problem of partition, and still meant war. Marlborough in London, Eugène in Vienna, desired it fervently. Being then unrivalled leaders on the field of battle, they had a great wish to tear from France her recent conquests, Franche-Comté, Alsace, even Artois, and they promised victory

to their sovereigns. If it must be war, Louis XIV preferred to fight with the King of Spain, his grandson, as an ally, and with all the resources of the Spanish Empire joined to those of France. Tempted besides by the project of a final glory, he accepted the royal heritage.

In January, 1703, the King appointed ten Marshals. "With the nine which there were already," observed Saint-Simon caustically, "that made nineteen. This was in order that there should be no lack of them." Harcourt, Tallard, Rosen, d'Estrées, Château-Renault, Monttravel, Chamilly, d'Huxelles, Tessé, were recipients of this honour. Their reputation was mediocre; but the other new Marshal was the septuagenarian Vauban. The delay had been long and often sad for him. Twenty years before he had confided in Catinat, who had said to him, "You shall be a Marshal of France." "I see clearly that I shall not be," replied Vauban, "and that they think otherwise about me." Catinat reassured him, "You could and should be. Peter of Navarre, an engineer like yourself, was one. . . ."

In 1691 Catinat, the citizen of Paris, was appointed Marshal, and Vauban, the engineer, was once more passed over. Catinat regretted that his friend and companion in arms did not share the honour with him. He told, in a letter, of a conversation which he had with Vauban on the subject. "I mentioned to him," he wrote,

" the hope I had that he would receive distinguished promotion if the King began the campaign again with a siege. . . ." The promotion did not come so rapidly, and Vauban had still to wait. Now he had obtained it at last ; the lowly country gentleman, the engineer who lived among his workmen, saw the crowning of his career. In future the King would write to him as " My cousin . . ."

" All congratulated him on this access of honour," wrote Saint-Simon, " to which no other of his kind had risen before him or has risen since."

This new grandeur was not without disadvantages, as Vauban was soon to learn. From Namur, where he was superintending the works, he came to Versailles to thank the King, who initiated him into the secret of the coming campaign : Kehl was to be invested. Who was to conduct the operation ? Vauban claimed the honour. Taking cities was his trade. The King replied, " M. le Maréchal, do you not think such an employment beneath your dignity ? " In fact, the duty of a Marshal was to lead armies, and Vauban was not the leader of an army, he was an engineer, a director of works, and could a Marshal, bâton in hand, direct the labours of the workmen ? Vauban protested that no dignity ought to be allowed to interfere with the good of the service.

" Sire," he replied, " the question is to serve you. The more highly you promote us, the

greater care we should take in your service. I will leave my marshal's bâton behind, and will help in taking the place."

The King smiled at Vauban's insistence. It was useless; the office of Marshal was not one that could be assumed and laid down at pleasure. The King was firm, and Vauban did not go into the trenches at Kehl. He went home bitterly disappointed, and consoled himself by drawing up the plans of the church of Briançon.

In July, to his great delight, the King recalled him. The Duke of Burgundy, Dauphin of France, was about to take command of the army and invest Brisach. A Marshal might be allowed to serve under so great a prince. The Duke was to have two to assist him; Tallard would take charge of the army, Vauban of the trenches. The King regulated this in a detailed letter.

"Marshal de Vauban," he wrote to Chamillart, "has told me that he proposes to do no more with the army of the Duke of Burgundy than he has done with me at all the fortresses I have taken, when he only concerned himself with the trenches and the assault of fortresses. He told me his plans, and explained to me what he thought should be undertaken. . . . The Duke of Burgundy can depend in everything upon Marshal de Vauban as upon Marshal de Tallard,(47) but of operations beyond the trenches, Marshal de Tallard will be in charge, and will issue all orders under the authority of the Duke of Burgundy."

Vauban hastened joyfully to Brisach. The Treaty of 1678 had given the town to the King ; Vauban had planned its fortification about 1680. The Treaty of 1697 had restored the town to the Imperialists. It was now necessary to recapture it, and for Vauban, the engineer, to assault the work of Vauban, the builder. The Duke of Burgundy rallied upon him this. "We shall see how you will contrive to take the fortresses you have built." Vauban, a good courtier on that occasion, replied, "Monseigneur, we shall see how *you* contrive to take the fortresses I have built."

Vauban set to work, made his preparations, walked about cheerfully in the drenching rain, chose the best positions from which to fire his ricochetting shot at the enemy, and sounded the waters of the Rhine. Brisach, as he well knew, possessed in these waters its best defence. The Rhine rose six inches, much to Vauban's annoyance. But the nights became colder, September advanced, the snow on the mountains would shortly cover the glaciers, dry up the torrents, diminish the river and thus empty the moats : patience was required, and Vauban put off the assault and advanced his parallels.

The Duke of Burgundy wished to visit them, and Vauban consented. He was slightly concerned, for the guns were active, and the proceeding was not too safe ; but he was delighted all the same, and was glad to conduct the young

prince. To show him his beloved works, to initiate him into the methods of sapping and mining, into the practical application of the calculations which his masters had taught him; into the knowledge also of the dangers which so many brave men endured for him. "When one has children," he wrote, "it is necessary to do everything that lies within our power to make honest men of them, and at least to enable them not to speak from mere hearsay of things upon which they will one day have to decide. They must have seen them closely, otherwise they will always remain pupils and not masters." He therefore showed him everything thoroughly, "from the tail to the head, and every part, whether advanced or not."

The Duke of Burgundy, frail in body and will, was pleased but fatigued. He could scarcely put one foot before the other on his return journey, and the aged Marshal, for whom the prince's journey came in addition to his inspection twice daily, was in hardly better state. "I was more tired on my return," he wrote to the Minister, "than I think I ever was before. . . ." But he would resume the experiment: "If it please God it will not be the last time that I conduct the prince through the trenches. . . ."

Louis XIV had this letter read to him, and it stirred the old heart of a soldier and a father. The Minister informed Vauban:

"His Majesty is greatly pleased. I think

that if he had been in your place on the day when the Duke of Burgundy was in the trenches, he would have wished, as you did, that the enemy's guns should be silent for the time. Everything that you have told him has caused him great pleasure."

After two days Vauban again conducted, advised and taught his prince. On his return, although wearied, he wrote a short letter expressive of his happiness. "By the way in which Monseigneur takes to it, I hope that he will be able, on his return, to propound fine theories upon trenches. . . ."

Meanwhile the works progressed; the breach was opened, and the level of the river gave at last the help for which Vauban was waiting. It fell, and thereby uncovered and "betrayed" the town. On September 6, Brisach surrendered.

"Behold that terrible Brisach, that incomparable fortress, reduced after an attack of fourteen days, an unheard-of thing for such a place. . . . Let us thank God, and not give it up again," Vauban wrote to the King, and without delay announced his intention of visiting a certain Madame de Ferréol who occupied his attentions at the time. "Your turn has come now," he said to her. "I am returning to Paris, and expect to see you fall into an ambuscade where I shall keep you for a week." (48)

He did not return to Paris. Wherever he

found himself unforeseen labours detained him.

"Finding myself a disengaged footman, I have thought it my duty to employ the little time that remains to me, between one cold and another, in visiting the fortresses of the province and putting anything that requires it to rights."

First at Brisach, then at Strasbourg, he inspected, repaired and perfected. It was an occupation that he loved. He loved every aspect of his profession. But there was one he loved still better; that which he had just experienced once more before Brisach. Whenever winter came, the season of colds, the old man breathed always of trenches and war. He discerned, without being told of it, the new blow which the King was about to deal. Troops and equipment, leaving Brisach, set out towards the Palatinate, and the secrecy with which their movements were shrouded did not prevent the guess which Vauban was the first to make: the King was about to lay siege to Landau. Why was it necessary for him to guess, and be kept out of the secret? He was hurt at this.

"By all the movements which I perceive being carried out, Monsieur, it appears to me that the King has made fresh resolutions and is about to undertake an important siege. I do not name the place, for that is still concealed. I see well, however, how it is. All the world is astir, and yet to me alone nothing is said. Is it that I am no longer good for anything? Although of an advanced age, I do not yet condemn myself to

rest, and when it is necessary to render an important service to the King, I know well how to set all considerations on one side, as much on my own account as on that of the dignity with which he has been pleased to honour me, convinced as I am that all which tends to the service of the King and the State is honourable, even down to the smallest things. All the more so when there is an opportunity of rendering real services such as I can render in the contemplated siege.

"This is why, although very undesirable from my own point of view, because apparently it will be cold, damp and lengthy, and many complaints are made of the discomforts of the season and the postponement of the winter-quarters of which the troops are so greatly in need, I pass lightly over all these details, as well as over those concerning my dignity, and offer whole-heartedly my whole abilities to the King, in any capacity which may please him. So long as I am able to satisfy him, it is certain that I too shall be satisfied. Let me know his will, therefore, if it please you, Monsieur, and the sooner the better, for it is of no use to offer oneself and to bring oneself forward in every way if one is not accepted.

"I am compelled to speak to you in this way for it appears to me that the siege is to be undertaken without me. I assure you that this causes me pain : put the matter right then . . .

"P.S. In God's name, let the King not have any doubts as to my method of serving him. I

will only concern myself in the matter of the parallels and assaults. That cannot cause jealousy to his general, to whom I shall be as subordinate as one of his lieutenant-generals might be, so long as I am allowed to carry out my own small duties. . . .

"Let me not be prevented, if you please. The King will cause me pain of which he will never be able to cure me."

Chamillard, the Minister, replied at once. His Majesty had read his letter; he had found in it without surprise the same zeal, the same ardour which had always been known to him; but the resolve had been taken. Marshal de Tallard would command the siege of Landau, and his authority could not be divided without serious inconvenience. Let M. de Vauban not think that the King's estimation for him was in any way diminished. His Majesty reserved him for the highest services in the instruction of Monseigneur the Duke of Burgundy. . . .

Vauban bowed to this decision. In future, he realized, cities were to be taken without him. Without him: that was the thought which tortured him. Could he not serve from a distance? He knew by heart all the sites, the plains, the slopes. With his eyes shut he could see Landau as though he were treading its glacis; he knew with certainty the measures that would ensure its downfall. He took his pen and with a rapid hand drew up a plan of operations, and sent it

without delay to the Minister with a noble word of explanation.

"Because, for reasons which need not be explained, it is not permitted me to conduct in person the assault of Landau, and thus to give a new mark of my zeal and of my love for the King's service, I wish to console myself as best I can by sharing my views and my feeble knowledge with those who are to take my place, so that I may at least have the satisfaction of not being entirely useless to His Majesty in so important a matter as this would appear to be. . . ."

And, the instructions given (they were very voluminous), Vauban concluded :

"These are the instructions which the short time I have had has allowed me to draw up. If I had had more leisure, I should have entered into greater detail, but such as they are, they contain nearly everything I consider essential to the conduct of the attack. I trust with all my heart that our brothers will endeavour fully to understand them, and will profit by them."

"Our brothers," a touching expression in which Christian charity is added to the rougher comradeship of arms.

In December he was in Paris. Unhappy Vauban, a "disengaged footman"! His fate was clear, he was a Marshal of the second class ; the dignity of his rank was at variance with that of his work, and this foolish contradiction condemned

him to inactivity. This was a novelty for him. The moments passed without employment ; Vauban watched them pass and relinquished to others the burden of work. His chills increased, he inveighed unceasingly against foolish honours, frosts, and coughs. But his ideas still abounded, and he wrote. The taste for it had come to him and increased with age. Because the King destined him for the service of the Duke of Burgundy, Vauban of his own accord devoted himself to it, and compiled with his own hand a treatise on *Sieges and the Attack of Fortresses*, which he offered to Monseigneur in January, 1704. Then he took up his collection of notes : what subject had he not dealt with in the course of a life so long, so hard-working, so wandering ? Canals, colonization, the recruiting of the army, the breeding of pigs, the enumeration of the people, the reform of the nobility. He collected his portfolios, classified them and clarified them : then, half-humorously, half-angrily, he wrote on the cover : " The idle thoughts (*oisivetés*) of Marshal de Vauban, a medley of writings of all kinds." So he enlivened his boredom and, helped by his draughtsmen, he drew for each of his memoranda beautiful embellished title pages, figures and sketches.

Some of his letters attain the magnitude of short essays, such, for example, as the pretty moral letter which he wrote to his nephew Dupuy-Vauban :

"I have thanked the King on your behalf and my own, Monsieur, for the favour which he has bestowed upon you in granting you the governorship of Béthune, and I have secured the charter of appointment which I am going to have put in a tin box to be addressed to Madame your wife by a sure hand. She will give it to you upon certain conditions which I have arranged with her. You will be careful, if you please, to comply with them, to secure a receipt and to send it to me. And you will come, this winter, to Paris, to thank the King personally and take the oath at the hands of M. le Chancelier, to whom you will present your charter. You will take care to ascertain beforehand the manner in which this is done and how your predecessors have conducted themselves. You can also learn it from M. de Pommereuil, and also by consulting me. The Governor's house is very fine and situated in the centre of your command (which, if it please God, we will extend as time goes on) and far enough from the frontier for you not to be alarmed by the prospect of a siege for a long time to come.

"Be scrupulous in discharging the pension attached to it, in giving up the 8,000 livres on the pay of the appointment, without making difficulties and always in an honest and straightforward manner. Govern as a perfectly honest man. Keep on good terms with your staff, consider them as your brothers, and do not deprive them of anything that the most honest of your predecessors

has allowed them ; give them rather of your own, if you can, so that no selfish interest of any kind may ever be imputed against you.

" Give honour to the men of quality in your government and to all others. Treat them civilly and do them a service when it is in your power. Govern with kindness towards your citizens. Be punctual and strict in the service ; outside it exchange every civility with the officers of your garrison.

" Go the rounds day and night frequently, in order to see if the guards do their duty and the sentries are alert and well posted ; by day, to ascertain the same things, and further the state of your fortifications, that all is well enclosed, that there are no breaches, no leakage of water in or out that might facilitate surprise. See the guard mounted often and learn well the routine of the place ; allow no single guard or sentry to be posted unknown to you.

" Do not allow cultivation on your ramparts or parapets, nor on the glacis of the covered way. If trees can be planted, give instructions that this should be done, and remember that the trunks are the King's and the branches the staff's, on condition that they have them well and properly lopped at their own expense.

" Visit your magazines and make them give you a list of their contents. Verify this yourself.

" Learn your fortress thoroughly and deliberate

every day of your life on the means of defence which you could employ in case of attack; and whenever a good idea strikes you, discuss it with your King's Lieutenant and the second-in-command, and even with your officers if they seem intelligent to you (it is a way of paying one's share which costs little); when you have examined it and approved of it, write it down.

"Live in the château and furnish it worthily but without ostentation. When you are in residence, keep a well-regulated table and give your officers one meal a day, correctly and without ostentation. When you are not there, your hospitality need not continue.

"Get into close touch with your citizens, be neither abrupt not unpleasant towards them, but govern them mildly. I mean the worthy people and even the lower classes, to whom you must always be just in all that depends upon you, as well as in all that depends on your government.

"Keep a good plan of your fortress in your own room, and also a map of your district, and let these be done to the same scale as those made for the King.

"You have a pretty wife who has more intelligence than I gave her credit for; she seems to me very worthy and apt in her duties. In a word, I am very pleased with her. You should never do anything with regard to your domestic concerns without consulting her; in matters which

concern the service of the King or your government, she must not be allowed to meddle under any circumstances. Nothing does a man more harm than to be swayed by his wife's feelings in the exercise of his duties. I have seen a thousand follies in this regard which have destroyed those who had the weakness to allow their wives to assume certain airs, which are not at all within their province. Let her be content to manage and govern her household without meddling in the concerns of the King. Let her be kind, honest, and civil to those who come to see her, without pride or self-sufficiency, and above all with much affability towards those of rank and character, especially to the women, who are difficult creatures to please and who never forgive.

"I think her very wise and virtuous; what I fear from her is not a dereliction of her duty, but rather a little stinginess and hauteur. I may well be mistaken, never having seen anything of the kind in her, but little women who know themselves to be pretty and of good birth are apt to mount on stilts and are not always easy to live with.

"There, my friend, that is what I have thought it my duty to add to your charter of appointment: it is now for you to conduct yourself wisely and in an irreproachable manner.

"As soon as you have received your charter, do not fail to write a letter of thanks to M. de Chamillart and M. de Peletier; although the

latter has done nothing, he has not failed to give me all the advice he could and which he thought might be useful to you for any reason.

"I am always yours to command.

"Le Maréchal de Vauban."

To understand our Burgundian, now a hale and hearty septuagenarian, we must not forget his feminine diversions, for Vauban still sought them. Unhappily it is not easy to trace them. Letters written and received have been thrown into the fire. However, a few remain, and they are sufficient to afford us a glimpse of some of the circles frequented by Vauban.

About 1700, a friendship, perhaps even a liaison, occupied him. He was intimate with a certain Madame de Ferréol, famous for her charms, and for what was then known, without too much implication, as gallantry. We have seen the terms in which he wrote to her of the fall of Brisach, and one may believe, knowing them both, that the ambuscade with which he threatened her was one of those snares which need not be described. M. de Ferréol was the French Ambassador at Constantinople; his wife, the Ambassadress, lived in Paris, in the Rue des Augustins, not far from the Rue Richelieu. The Pontchartrains, the Grammonts, the Contis, graced this district, then very fashionable. Vauban had his town house there, between the church of St. Roch and the Tuileries gardens. Madame de Ferréol lived with her sister, a former nun, who

by the good offices of her uncle, Cardinal de Tencin, had received permission to re-enter the world, where, under the name of Madame de Tencin,(49) she led a very active and unrestrained life. She is still remembered to-day.

The future was to be greatly beholden to this society of Ferréol and Tencin. Madame de Tencin had a son, who was brought up among strangers ; he was to be known as d'Alembert,(50) the philosopher and encyclopædist, the friend of Voltaire and the agent of his influence. M. de Ferréol, on the other hand, interested himself, in his distant station, in a Turkish child called Aissa. He sent her to his wife to be educated. Mademoiselle Aissa was famous in the eighteenth century for her affections, her unfortunate love affairs, the charming and pure style of her letters,(51) and her pious honesty. . . . Without doubt, she must more than once have sat on Vauban's knee. Thus, wherever we look, we see the appearance of the actors in a new century. What a period have we not covered in the course of fifty years ! When the young Vauban answered the summons of Condé, he was a young man of the feudal ages ; and this Paris where the closing years of his life were spent was only yesterday our own.

In 1705 we find another story and other surroundings. Vauban had been a widower for more than a year, and there was now no suggestion of Madame de Ferréol. A plot was woven to snare him into a second marriage.

The centre of this intrigue was a certain Mademoiselle de Villefranche, the daughter of a Protestant family. She had emigrated with her people to escape the persecutions of the Revocation, but had subsequently returned to France. The Count of Toulouse, the illegitimate son of the King, to whom the lovely girl had attached herself, protected her. In the end the Count, growing weary of her, wished to give her in marriage, and selected as her future husband, a certain M. Bose, whom the King, as a reward for his complacency, was to have taken as his secretary. But the King refused to play his part in the bargain.

"The King will not have Bose as his secretary," wrote Madame de Maintenon to Monseigneur de Noailles, the Archbishop of Paris. "He says that he will willingly marry Mademoiselle de Villefranche, with whom he is desperately in love, without any reward. I think this a very ill-matched marriage, and I should wish to secure for this girl some old lord who was charmed with her beauty. . . ." The old lord decided upon was Vauban, whose eagerness was well known.

The young Duchesse de St. Pierre, sister of Torcy, the Foreign Minister, undertook the conduct of the plot. She had just been married to an aged and very wealthy Spaniard, and was not averse to bringing about a similar union. The King was amused by the affair, and it was no doubt for his entertainment that d'Argenson, the Lieutenant-General of police, sent to Pontchartrain,

the chancellor, the report of which the following is the gist.

"PARIS,

"*November* 10, 1705.

"M. le Maréchal de Vauban has not yet paid his formal visit to Mademoiselle de Villefranche, much to her annoyance; but he sees her nearly every day at the house of the Duchesse de St. Pierre, where great care is taken to please him, to agree with everything he says, and to applaud his polished wit and the grace of his conversation, eulogies which he richly deserves by the eminence of his abilities and by far more substantial virtues. His people declare however that Madame de St. Pierre's scheme will not come off, and that their master frequently laughs about it; but the lady, accustomed to the surrender of the most inaccessible hearts, still flatters herself that he will not escape her, and that continually seeing her will necessarily awake a violent passion which she will know how to make use of."

The master might well laugh at it. He was initiated into feminine intrigue, and the lovely girl did not entrap him. She did not become Madame la Maréchale, nor did he emulate the doting old gentlemen to be met with in the pages of Molière, Regnard or Dancourt. Vauban had a passion, and that was his profession, his country and his

King. Beyond the limits of this passion he knew merely in passing fancies.

He made no more journeys. Winter confined him to his house. He could no longer travel as before, enclosed in his litter, blowing through his numbed fingers, and sleeping as best he could between the stages, or even in the litter itself. He regretfully abandoned his tours of inspection. "If I were younger, and it were not so far," he wrote to Dauphiné, "I would offer to go periodically to put things in order on the spot; but I can no longer undertake such duties. I should need for that a health and leisure which are not at my command."

But though his legs failed him he still possessed his memory. A minister had consulted him upon some works which were being carried out at Brest. "I know my Brest well," he answered proudly, and without leaving the table he issued detailed instructions. He could give advice, but would it be followed? Would the Breton engineer on the spot understand his design? Would the contractor at Briançon build his church exactly as he had planned it? Vauban was used to seeing and touching things himself; he was not only an engineer, but a carpenter, a mason, and even at need a labourer: the whole carrying out of his plans interested him, and when he did not follow them in their minutest detail, he worried, grew weary and pined away.

Alas, Vauban knew that people only half listened to him. He was a white-haired grumbler, and the younger generation only respected him on condition that he did not presume to teach them. The New Marshals made this clear to him. Tallard, before Landau, seemed deliberately to reject his advice. The Le Villeroys and La Feuillades, foppish and incapable court soldiers, did not like his way of lecturing them, of impressing always upon them the necessity for prudence and cautious scheming. They attacked, as was their nature.

It cost the King dear. In August, 1704, Tallard and Marcin were defeated in Bavaria, and their army was destroyed. Louis XIV thus experienced his first disaster. The Imperialists advanced, and nothing could stop them. They crossed the Rhine, and their cavalry came under the fire of the guns Vauban had emplaced. In September Landau was invested, and the city fell in November. Vauban trembled ; his work was struck, the enemy had broken through that ingenious assembly of levels that could be flooded, of batteries, and of fortresses which covered his beloved country. Behind Landau he knew of a gap by Thionville that worried him.

If he could only go there ! He surrounded himself with maps, and demanded more, the most recent, most detailed. He drew up an entrenched camp, where some ten thousand men could arrest the progress of an army. The suggestion was

made ; would it be accepted ? For more than ten years, Vauban had attempted it : but the King did not like entrenched camps. He considered that he lost dignity by the use of them, and when they were mentioned he did not reply or did so coldly (August 17, 1693). " Oh, foolish nation ! " wrote Vauban, " which holds that it must always fight as it stands and take no care of anything beyond the immediate defeat of the enemy " (May 28, 1693). Would the French point of view change by profiting from the useful lessons which the Germans were affording it ? Not yet, more than one disaster was needed for that.

The enfeebled reign declined rapidly towards its close. The aged King listened to presumptuous children. La Feuillade, brave and vain, a courtier and the son of a courtier, not only a son but also a son-in-law, for he had married the daughter of the Minister Chamillart, was a great favourite. Louis XIV sent him to the Alpine front in command of the armies. Dauphiné and Provence were provinces thoroughly reconnoitred by Vauban ; he was interested in their defence. He wrote to La Feuillade : " Come and see me as you go through Paris. I will tell you what I know about the enemy's fortresses and our own ; in order to explain to you more clearly, I will take you to the Tuileries where the King has relief models. . . ."

These relief models were made exactly corresponding to the original. The collection had been

begun thirty years previously, by a friendly exchange between Vauban and Louvois. "Give me a copy of your portrait by Mignard," Vauban had suggested, "for me to hang in my room, and I will give you a plan of Lille very carefully made, with a description of the surrounding country within cannon range,(52) where everything down to the smallest ditch is put in its proper place, so that no detail is lacking." This fine plan had given pleasure, and the King had desired to have, in one of the halls of his palace, a detailed reproduction of all the fortresses of the Kingdom. It was one of his pleasures to inspect them, with Vauban by his side to explain them.

La Feuillade answered, appointing a day and hour. Vauban waited, but he did not come, and sent a message that he had been obliged to go to Versailles and could not see him. That was of no consequence, declared Vauban, he could come when he liked, he had only to say when it suited him. . . . But La Feuillade did not come, and went away without seeing Vauban. "Thus my good intentions were in vain," commented Vauban, relating his disappointment. He recommended a prudent campaign : Nice and Montmélian were to be taken and garrisoned to close the gateway of the mountains ; Mirandola taken and destroyed. Beyond the Alps there were to be no rash enterprises. Turin might be bombarded with red-hot shot, Piedmont denuded of supplies by encamping the army there, and enfeebled without incurring

the risk of an engagement, so much would suffice. . . .

La Feuillade had other ideas. His ambition was to lay siege to Turin, a most formidable fortress, and to carry it by assault. Vauban protested against the undertaking of such a siege without due preparations. The difficulties were enormous; perhaps they might be overcome, but only by careful approaches, the art and method of which were unknown to La Feuillade. Vauban cried aloud and was at last listened to. In May, 1705, it was decided that La Feuillade should not attack Turin. The months passed by, summer was almost over, and at last news came that La Feuillade was before Turin and digging trenches. Vauban once more intervened. If the attempt were to be made, he determined to take part in it. In a moment his plans were ready, and he transmitted them to the Minister at the same time as he made known his wishes.

As for his physical strength and his power of resistance, he represented that during the fine weather, which was the weather for sieges, his health was pretty good But it was not upon this score that Chamillart foresaw difficulties. "M. le Maréchal de Vauban," he wrote to La Feuillade, his son-in-law, "has a great desire to conclude his career by the siege of Turin. He has told me so himself. But it is extremely difficult to reconcile his suggestion with the importance of your own position, which I think you will fulfil worthily."

Vauban offered to consent to anything to smooth the way. "I will leave my Marshal's baton behind," he repeated, "and we will take Turin." But could he cease to be Vauban, could he renounce his prestige and his glory? Were he to be present at the siege, even in the capacity of an adviser, he would gather to himself all the glory without seeking it, and it was necessary for the Chamillarts to augment the reputation of the family by a glorious success. And La Feuillade, that foolish fop, had the insolence to reply:

"Have confidence in me, and you and the King as well will do better than to employ all the engineers in the world. There are men born to command, and those gentry are merely for the purpose of obeying the orders given to them."

Chamillart, who was a prudent man and knew his son-in-law, was distinctly alarmed. He listened to Vauban's criticisms, and forwarded them to La Feuillade. Soon the King became concerned, called Vauban in to advise him, and as a result decided to put a stop to the undertaking. La Feuillade obeyed, but still upheld his scheme. "Sire," he wrote, "I take upon my own head the success of the Turin enterprise." He was appeased by being told that it should take place the following summer.

Could Vauban remain idle? It was not his custom, and since the labours of war were denied him, he revenged himself by devising several peace-

ful tasks. He had in his mind vast schemes for the development of the canal system of Flanders. Lille, he had long thought, should be afforded access to the sea by way of Graveline. Without saying anything or warning the Minister, he left Paris, travelled to Flanders, and assembled the deputies of the States and cities, who listened to him in dismay. Overwhelmed by the cost of the war, they saw themselves faced with fresh expenses. "It is for your ultimate good," explained Vauban to them. "But first it will cost us much," they replied. Vauban insisted. Regardless of his age, he remained the determined man of a former period, who failed to understand a limitation of his schemes or an obstacle to his undertakings. He traversed the countryside, carrying with him the delegates who opposed him, to survey the district in detail, to lay out the lines and the ground. We have on this subject a letter from Delezenne, a "sergeant-at-arms" which describes the Marshal as he was :

"I forgot to tell you that, coming away from St. Venant, we took to our legs and went the whole length of the Neuf-Fossé almost into St. Omer, and from there we went to see the river Aa a couple of leagues from St. Omer, and all this was accomplished on the Wednesday. That did not hinder M. le Maréchal from returning on Thursday, as I have already had the honour of informing you. I perceive M. le Maréchal to be still set upon his purpose to the extent of saying to M. de Saint-

Marcq : 'Be good enough, M. de Saint-Marcq, not to incite your magistrates to prevent my scheme, and do not shout so loud as you sometimes do.' You may judge from that how determined the Marshal is upon his project." (53)

Nevertheless, opposition grew. To complaints and refusals were added slander and sophistry. Vauban became indignant, he discussed, refuted, and was oblivious of the fact that his stormy resistance was stirring up the whole province against him. Already Chamillart had warned him of the discontent he was arousing. "You know better than anybody the troubles of that district, and the impossibility of laying fresh burdens upon it. . . . I should have thought that being Secretary-General for Home Affairs and besides Counsellor-General of the Treasury, and in the latter capacity responsible for all public works, you would have been willing to confide your schemes to me." Vauban's enthusiasm would allow him to listen to nobody ; he was finally stopped only by force. Lille wrote to the King ; Boufflers, the Governor of the city, supported the petitioners. Chamillart acceded to their demands, and Vauban, defeated, was compelled to quit Flanders which he loved so well.

"Your letter," he wrote finally to the worthies of Lille, "contains so many extraordinary arguments such as I never expected, that I almost feel horns growing on my head. . . . My intention in bringing water to your doors was not to steal a drop from any one who had need of it. I travelled

through the country where I took considerable pains with the sole idea of giving you pleasure of it, for I have no interest in it myself. But since you do not want it, you shall not have it, and I promise you that never again in my life will I concern myself with your affairs, whether for good or ill."

An oath made in anger which he did not keep. Vauban, on his return to Paris, committed his plans to paper, and engraved the plates for it. He no longer bore ill-will towards those who had reviled him. He wrote that he must pardon them.

"It is no new thing for people to reject all new ideas without weighing them thoroughly, when they think that they will cause them expense. It is natural, and one should not think it strange that they should oppose that which they fear and which might fall to their charge. The exhaustion which the late war has caused them has made them fearful of fresh expenses, and I should not have had a word to say had they understood before they complained . . ."

The schemes of Vauban were useful one day. In 1770 they were taken up and put into execution, and did not fail to enrich those people to whom Vauban had desired to "give pleasure."

The year passed in inactivity, but harmlessly, since the enemy, himself wearied, was taking breath and saving himself. But the people suffered and longed for peace. Vauban drew up a long, an

over-long, memorandum on the subject, in which his increasing years are apparent, and sent it to the King. Let Spain and the Empire settle their affairs in Europe, was the substance of his advice, and let France think only of her frontiers, Let her demand the Duchy of Milan for the Duke of Lorraine, and let him give France his province. Let her demand Landau, Luxembourg, so essential to her, a few districts in the Ardennes, and no more. . . . This was his "Suggestions for a Peace reasonable enough for all those interested in the present war to be content with, were it to be signed and if it pleased God to bless it" (February, 1706). Vauban did not know that at the very time he was writing, Louis XIV, negotiating for himself, had received the curt reply, "Give up Alsace and disarm your coasts. . . ." It was necessary to go on with the war.

How far off were the days of Condé, Turenne and even Luxembourg! Versailles could produce nothing but follies in opposition to the manœuvres of Marlborough and Eugene. La Feuillade was still in favour. Madame de Maintenon found him charming, the King thought as she did, Chamillart protected his son-in-law. Since La Feuillade insisted so strongly upon the Turin adventure, let him try it. All the arsenals of France laboured to equip him for the purpose.

But Vauban still disapproved, and this disapproval disquieted the King. He once more sought the advice of the man who had brought him

so much glory. Vauban repeated his counsel, and wrote a last memorandum ; Turin, he maintained, could not be taken by a single and impetuous assault, Marshal La Feuillade's plan was a bad one. In order to succeed, more men, more material, more patience were needed than appeared to be available.

Vauban concluded with a touching page upon which his ageing hand expressed both the desire for action which still possessed him, and the weariness which had overcome him.

" After having spoken of the King's business, I dare presume that I may be allowed to speak of myself for the first time in my life. I am now in my seventy-third year, having undergone fifty-two years of service, and burdened with fifty considerable sieges and nearly forty years of perpetual journeyings and inspections of the frontier fortresses, which have called forth many pains and wearinesses of mind and body, for I have never heeded winter or summer. It is impossible that the life of a man who has lived thus should have escaped wear, and it is this that I feel only too acutely ; especially since the chills which have persecuted me for the last forty years have grown worse and become daily more troublesome. Already my sight fails me, and my hearing is becoming hard, although my brain is still as good as ever. I feel myself fallen and very much enfeebled in comparison with what I once was. It is for this reason that I dare no longer suggest myself for

difficult and extended tasks, which demand the almoſt conſtant preſence of those in charge of them. I have never acted as Commander-in-Chief of an army, nor as General, nor even as *Maréchal de Camp*, and with the exception of a few special commands such as those of Ypres, Dunkirk and Lower Britanny, which thanks to God I filled with success, there are no others worth mentioning. All my service has thus been spent in sieges and in fortifications, which, thanks be to God, have brought me much honour ; these things being literally as I say, it follows that I should be out of my mind, so nearly decrepit as I am, if I were again to go chasing butterflies and seeking to command armies in difficult and thorny operations, having had no experience of such duties and feeling myself failing to the extent that I could not bear to be on horseback for four hours at a ſtretch, or walk a league without reſting. I muſt therefore reſt content with what I have already accomplished and at leaſt not undertake things in the execution of which my ſtrength and wits might in failing me plunge me into miſtakes which would dishonour me ; rather death a hundred times than those things which offend God.

" As for the proſpect of my rendering aſſiſtance in matters touching the direction of assaults, I could ſtill endure, for good or ill, the fatigues of a siege or two in a campaign, if I were supplied with the necessary material and troops were ſtill available of the quality of the paſt ; but when I consider

that the armies are full only of young men without experience and recruits who have been almoſt all enrolled againſt their will and are quite undisciplined, I tremble and dare not wish to be present at any important siege. Besides, the dignity with which the King has been pleased to honour me embarrasses me to the extent of not knowing what to do. On such occasions I fear what will be said of my colleagues on the subject, so much so that I do not know what attitude to take up or how to decide. I should also add that I rid myself of all my war equipment some four or five months ago, after having kept it from the beginning of the war till then. After all that, if it be absolutely necessary that I should take the field, I shall do so in spite of all that may be said and all that may happen. The King having the chief place in my heart after God, I shall joyfully accomplish all that he may ordain, even though I lose my life through it ; and he may reſt assured that the lively appreciation I have of all his kindness will never fail me. The only petition I have to make of him is that he will take ſteps to guard my honour.

" I am diſtressed, Monsieur, to weary you with so long a letter, but I have been unable to make it shorter. I would have brought it to you myself if the chills which beset me did not force me to keep my room."

The King had a kind reply sent to him ; his advice should not be disregarded ; La Feuillade's engineers should, by the express command of the

King, confer with Vauban. But what was the use, if in the end he was not to be heeded ?

Ramillies was the second disaster, this time in Flanders and on the frontier itself. Villeroy, utterly incapable, deployed his army carelessly, and as carelessly retreated, losing in a single day Brussels, Ghent, Louvain and sixteen fortresses guarding France. Versailles was greatly cast down. At last the King remembered the old servants who remained to him ; Vendome superseded Villeroy, and Vauban, the *doyen* of the armies, received the order to defend Dunkirk.

He went, forgetful of age and weariness, asking only for a little money for his journey ; he was always giving, and had none in consequence.

" Remember," he wrote to the Minister, " that there is scarcely a Marshal of France in such low water as I am. Well-disposed people who make it a point of generosity and honour not to mix the goods of others with their own, are usually down at heel and careworn if the King does not help them."

So he returned to Flanders, where his career had begun and where he had executed so many works, to Dunkirk, his chief accomplishment and his pride.

He was Commander-in-Chief, with absolute power : it was for the last time, as he guessed, and he devoted himself to his duties. He drew up in advance of the town one of those entrenched camps

which he had always recommended, and set to work to defend it with the few troops allotted to him. He inspected the low-lying country which stretched towards Nieuport, and the dykes which kept it dry. Should he flood it? The King authorized him to do so, but he considered its produce, its harvests, and deplored this threatened wealth. He resolved not to drown it, and Chamillart thanked him.

"Your name alone," he said, "apart from all the precautions you are taking, will impress the enemy. I hold Dunkirk to be completely safe." Doubtless Vauban smiled and shrugged his shoulders as he read these compliments. Louvois had never written thus; the men of 1660 did not introduce the style of gallantry into business matters. They knew, Louvois knew, Vauban himself knew that war was not waged with empty phrases, but with care, watching, and endless fatigue.

The hostile threat grew distant and passed away. Dunkirk breathed again. The King put Lille into a state of defence, and Vauban was sent there. But as soon as Flanders was relieved, trouble came from another quarter, that of Piedmont, where La Feuillade, seriously entangled, began to show signs of distress. Chamillart admitted it to Vauban, who gave fresh directions and repeated his still unheeded advice.

"You mentioned Turin to me casually, without which I should not have mentioned it again. Do me the honour, if you please, to believe me once for all. Turin will not be taken at the point where

the present attack is being launched ; you will even have some trouble now in taking it by way of the Capucins, because already your army appears to me to be very wearied. Mining and countermining will lead you to the end of the world and will only result in burying alive the best of your troops ; for the enemy being in a superior position has only to wait for you ; and it is certain that he has the advantage over you in mines."

Vauban was right. This " fatal son-in-law," as Saint-Simon called La Feuillade, brought a third disaster upon the King. In September, 1706, Prince Eugène, at the head of a relieving army, attacked La Feuillade in his trenches, defeated him and raised the siege of Turin.

" I am aware that you were a prophet as regards Turin," whispered Chamillart to Vauban. " It is quite certain that if you had had charge of the undertaking, Turin would have been in the King's hands over three weeks ago." Vauban did not reply ; he remained silent, not being the man to seek credit in a misfortune which he had predicted.

October flooded Flanders and stopped the war. Vauban asked to be allowed to return home. He informed M. de Pontchartrain :

" I yesterday asked for my dismissal, for I can do no more here and the chills begin to attack me fiercely. Besides, I am on my beam-ends, that is to say without pay, laying the table morning and evening, obliged to raise funds by borrowing right and left with great difficulty. . . . I certainly did

not seek this employment, which I shall be well out of, old and infirm as I am. I have nevertheless performed my small duties as well as I could and I scarcely think that any one else would have done better."

Ramillies in the spring and Turin in the autumn ! The glory was tarnished, the well loved army humiliated, and France, which had seemed invincible, threatened within her own borders. We should like to hear the voice of this weary old warrior, transported with anger and with love. A single line, the record of a single fact would be enough for us to form a picture of him ; but we have nothing. The sad years are silent, few letters or Memoranda exist. There was silence at Versailles, save in the secret corners where the decadence of the Regency was already beginning. In Paris tongues were loosened, but men's pens remained prudently idle and tell us nothing.

What was being said, and in what conversations did Vauban find himself involved ? Without doubt there were murmurs against the King and his Ministers ; the old spirit revived in the breasts of those gentlemen of the robe and sword whose fathers had fomented the *Fronde*. They agreed in desiring a revival of aristocratic, parliamentary and municipal liberties ; some of them even spoke with bated breath of an appeal to the States-General being necessary. The *Frondeurs* began their factions once more after the lapse of fifty years.

But Vauban had nothing to do with them, he was a convinced Royalist. He wished to see that authority, against which those about him plotted, not less powerful, but more so, in order to arrest the evil. What was the cause of the disasters? Vauban repeated over and over again, perhaps even to weariness, the idea which for ten years had been his obsession. These revenue-farmers, these financiers; the fiscal system and its agents, who devoured the people and made them disaffected, these were the worst enemies of the kingdom.(54) The King alone could oppose this breed; he was the true defender of the people, the only one who counted in France. And the remedy was at hand; Vauban had shown it and described it in his *Dixme*. What Sully had known how to do with Henry IV, Colbert with the young Louis, would Louis now, old and solitary as he was, dare to do?

Few voices urged him to it. Gold has always its peculiar safeguards. To the powerful it gives daughters with rich doweries, to literary men good dinners, a few coins, an ell or two of cloth with which to adorn themselves in new raiment. The rich know how to distract attention from themselves and fix it elsewhere. La Fontaine and Madame de Sévigné were devoted to Fouquet; Voltaire was to be devoted to his friends the financiers; Rousseau was to eat their bread and make love to their wives . . . La Bruyère had remained free from their fetters, but he was dead, he was no longer present to understand Vauban, and it is difficult

to see any one, except Boisguillebert, who could take counsel with him in this year 1706. A few soldiers, perhaps ; Boufflers or Catinat. Vauban saw clearly, he knew the seat of the grave evil and the fatal germ from which the French monarchy suffered. On the eve of the Revolution, we see the appearance of health, a fine army and navy, but the Court still ruinous, the financial system oppressive, the financiers still burdening the people with their exactions, and exhausting the treasury with their usuries.

In Voltaire's time they were called "*Fermiers-Généraux*" ; in Vauban's old age, they were called "*Traitants*" ; in his youth "*Partisans.*" The term changed but the evil remained, and it was fatal ; fatal because it was hidden. The first thing the financiers bought was silence, and they succeeded in destroying, so highly placed were they, the rash men who denounced them.

Vauban came back to Paris and to his house in the Rue Saint-Vincent, by no means a magnificent dwelling, but of good appearance and with a high door dominating the narrow street thronged by people of the lower classes. It appears that he found there his daughter, Charlotte de Mesgrigney. He was in bad health, he coughed, his weary body was undermined and his end was near. God was about to grant him his well-earned rest. But the poor people worked unceasingly without rest, and it was of them that Vauban thought. What future was in store for the people of France ? Vauban,

who had done so much, wished to do yet more and not to vanish until he had performed every service in his power to France and to the King. Of all his writings it was the *Dixme Royale* by which he set most store and perhaps he loved the *Dixme* the best of all his works. The King had read it; what had he thought of it? What had he done since then? Vauban took up the Memorandum once more, re-read and corrected it, sad at being its sole reader. He called to his side to help him with his work, a certain abbé Ragot de Beaumont, who had once been his secretary.

Who was this abbé? A rather disreputable and singular personage, we are told. He was doubtless one of those starveling intellectuals who went from house to house, talking, supping and scribbling, in threadbare and stained cassocks. The liberal ladies of the eighteenth century had at their disposal many Ragots de Beaumont; other Ragots, relinquishing their cassock for the garments of private citizens, were in 1792 to become the demagogues of the Clubs. The seventeenth century had cold-shouldered the Ragots; but they existed for all that, dragging out an existence with downcast eyes. That agent who procured books for Vauban and whom the police endeavoured to hunt down, may he not have been our Ragot? Perhaps; it was he or another such. Vauban installed him in his own house, in a closet which communicated with his own study by a private staircase. The two men worked together. We

may guess the subject that occupied them. Vauban gave vent to his sorrow. "Must I die," he said, "must I go hence without my Memorandum having been read?" Ragot gave his advice. "Have it printed." But Vauban replied, "It is impossible. These are matters of State, and the King would never allow it."

Who in fact would have given the necessary permission? Pontchartrain, cringing and timid, whom a contemporary describes as "entirely given up to King interest and self interest, without a care for the public weal?" Pontchartrain would have forbidden the *Dixme*. D'Argenson? He was wrapped up in his policeman's work, a slave to routine "detailed and narrow," pursuing as the same quarry the *Maximes des Saints* and obscene scribblings, *Télémaque* and the secret broadsheets, d'Argenson would not have tolerated a book such as this *Dixme*.

Besides, the whole custom of the period and its policy were opposed to Vauban's wish. To ask would have been merely to invite a refusal. He must abandon the idea. "Or ask for no permission and print it," whispered Ragot. Ragot understood such matters, he knew of secret printing presses, those who would distribute the work. And if the old soldier recoiled from such methods, Ragot amended his advice. "Very well, do not publish it, keep copies by you and distribute them from hand to hand among your friends."

A second voice may have supported Ragot's, it

seems to me very probable. Boisguillebert spoke to Vauban, and added fuel to his sorrow. The two men knew one another, read one another's works, exchanged notes. Thus we shall see them, urged by similar motives, acting in the same way ; why should they not have agreed upon it together ?

Boisguillebert, in this tragic end of the year 1705, was in a state of fury. Doubtless the fury of a patriot, but also, perhaps in a greater degree, the fury of an inventor who has been shown the door, for the King's Ministers had refused to listen to him, Pontchartrain rudely, Chamillart politely : " So long as the war lasts," the latter had told him, " the war alone must be considered. The time for reforms will come later." Neither Boisguillebert nor Vauban accepted this answer. The war, and the necessity of emerging from it with honour, was the very reason for the reform of the Fiscal system, they believed. What should they wait for ? A peace which might well be disastrous ? Boisguillebert, in exasperation, published in France itself a new edition of his *Détail de la France*, and added to the text a hastily written postscript in which he replied to Chamillart. This reply is a cruel pamphlet, somewhat ponderous, but hard and powerful ; quite different from the style of the lively eighteenth century. Written between two periods, Boisguillebert's pamphlet had the hardihood and Jansenist breadth of the one, and the reforming zeal and insolent manner of the other.

"Must we wait for peace before cultivating the land in the provinces where most of it lies fallow?

"Must we wait for peace before stopping the destruction of the vines, as is done every day, while three-quarters of the people have nothing but water to drink, because of the terrible tax which is four or five times the value of the produce? Is it reasonable that we should wait until all the vines have been torn up before permission can be given to the people to cultivate them; which would then be utterly useless and scarcely better than calling in a doctor to cure a dead man?

"Must we wait for peace before ordering that the taxes shall be equitably spread over the whole kingdom, and that large taxes should scarcely ever be collected, while a poor man who has nothing but his hands wherewith to support himself and his family, after the sale of his movable possessions and the tools with which he earns his living (as is done with those utensils which are regulated by the *Taille*), has to witness the removal of his doors and mattresses to make up, or more than make up, the amount of a levy more than four times the value of his goods?

"Must we wait for peace before saving the lives of two or three hundred beings at least who die every year of want, especially children, of whom not half succeed in reaching an age when they can earn their own living, owing to their mothers lacking milk, to scantiness of nourishment or excess of work: while at a more advanced age,

having but bread and water, without beds, clothes or medicines for their sickness, and lacking strength for the continuance of their work, their sole source of revenue, they perish before they have attained the best years of their lives ?

" Must we wait for peace before ceasing to ruin the state in the King's name, so that at the end of the war the payment of interest on the money advanced will cost the people more than the expenses of the war, so that they will have to endure a perpetual burden ?

" Such cruel dispositions and such statements on the part of the revenue farmers should not surprise us, for it is by such means that they amass the huge fortunes which are the ruin of the state, and because they have extorted, since 1689, two hundred millions on their own account, without reckoning that of the parasites who grow beneath their feet, ten to twenty times as much as the King receives from them through such a fatal channel.

" It can be stated that the War is ten or twenty times less costly to the Kingdom than the internal disorders caused by the devices practised to find the money to prosecute it. To make the War an excuse for postponing the re-establishment of the common welfare is the same error as a man would make if, when his house was on fire, he maintained that the conflagration must not be extinguished until a law-suit concerning it before a distant tribunal had been settled."

Boisguillebert had not waited for peace before

raising his voice. Would Vauban do so? Racked by fever, and threatened by death, he still longed to speak. He must do so, for the King's own good. In the old days, about 1660, a powerful and enlightened public spirit had supported Louis against men like Retz and Fouquet; it was necessary to arouse public opinion in a similar cause. Vauban was not to die before publishing his *Dixme Royale*, and his thoughts were not to be extinguished with his own breath. He listened to the advice of Ragot and Boisguillebert, and printed his Memorandum. He printed it without publishing it; as a soldier and a Marshal of France he would not offend against his King. Without selling it or allowing it to be sold, without causing disloyal comment, he gave copies to his friends. Thus he salved his conscience. But for all that he knew that he had taken a serious step. Louis XIV, Colbert and Louvois had not been afraid of far-reaching reforms, they had sought advice from all quarters, but they had forbidden discussion and had always acted on their own authority. When Vauban wrote to Louvois with the freedom we have seen, Louvois thanked him; but if he had spoken as he wrote, Louvois would have reprimanded him, and had he dared to print his suggestions, Louvois would have sent him straight to the Bastille. Now, Vauban, a Marshal of France and a septuagenarian, had printed a political Memorandum; he was false to the spirit of his generation and the duties of his position.

Where was the *Dixme* printed? Perhaps in Flanders, as Vauban's household suggested when interrogated by the police; more likely at Rouen, thinks M. de Boislisle, with a profound knowledge of the times. Boisguillebert and the abbé Ragot de Beaumont were at Rouen. Vauban was in touch with people there through them.

Once the *Dixme Royale* was printed it remained to smuggle it into Paris. It was not a pamphlet that could be put in one's pocket. Vauban had wished to produce his book in proper form, that it might be worthy of bearing, on its leather binding, the arms of a Marshal of France; it was a quarto, difficult to hide.

A bale of copies was brought as far as St. Denis. The problem was then to get it through the gates of Paris. Vauban solved it. He went to St. Denis in his finest carriage, and, saluted by the guards at the gate, brought the forbidden book to his own house.

The printer had delivered the work in sheets. Vauban applied to that same widow Fétil who, four years previously, had stitched and bound the manuscript copy which he had presented to the King. She stitched the *Dixme Royale* in a covering of veined paper, and bound the copies, some in morocco, the rest more plainly in calf. It was about the beginning of February, 1706, that Vauban began to distribute his work. Did he take a copy to the King, and did the King take it amiss? On this point we have only the evidence of Saint-Simon,

which is slight. If Vauban did perform this act of homage, the King could hardly have failed to express some displeasure ; fifty years spent on the throne had confirmed him in the precept that politics must not be publicly discussed. The services and age of Vauban could not excuse his dereliction of duty ; they made it all the more striking and culpable.

" Vauban's book," wrote Saint-Simon, " made a great stir. It was popular with the public, praised and admired by them, censured and loathed by the financiers, hated by the Ministers, whose anger it excited. The Chevalier de Pontchartrain in particular, made a terrific row about it, and even Chamillart forgot his usual politeness and moderation. The revenue magistrates stormed, and the tempest grew to such heights that if they had had their way the Marshal would have been sent to the Bastille and his book handed over to the public executioner."

Saint-Simon is still read, but not always believed. In his *Mémoires*, written twenty or thirty years after the event, we find only the traces of his vivid impressions. His style is a sort of sounding-box in which we hear the uproar, and it pleases us because he tells his story with the sturdiness to which we are accustomed. Shall we believe that Vauban's book " made a great stir," that " the public " admired it ?

In any case we must read these words in a sense we cannot properly estimate. This " public," so

moved by the few copies given to his friends, has nothing in common with the multitudes which that word denotes in these days. And this "great ſtir" was no more than some slight exchange of views in chimney corners. Saint-Simon has a privileged position, for he is the only witness. As we have already remarked, the end of this great reign was silent. The writers of memoirs and letters of 1660 were dead, and neither Barbier nor Bachaumont had yet begun their journals.

Doubtleſs some curioſity was aroused, and some ſurprise and diſapproval in high places. The book annoyed the financiers, diſpleaſed veſted intereſts and annoyed diplomatiſts, for published as it was, in time of war, it divulged a poverty which had been carefully hidden from the enemy. "I demonſtrate the cure for this poverty at the same time as I divulge it," replied Vauban. Was this correct? Was the Government free to take action againſt the financiers, who, while ruining it, ſtill fed it from day to day with ſupplies and loans? Could the Government turn againſt them in the height of war? Vauban promiſed it the ſupport of the people againſt them. Could this ſupport be relied upon? Basville, an intrepid reformer, obſerved in this connection that the people loathed above all things a tax to which they were not accuſtomed. Certainly neither Pontchartrain nor Chamillart poſſeſſed the deſire or the greatneſs to embark upon ſuch a ſtruggle, nor was the old King at an age when he could have urged them to it.

On February 14, 1706, the matter of the *Dixme* was brought before the Council, and a decree issued. This decree was curious ; its indecisive terms seem to reflect a decision wavering between the necessity for severity and the respect which it was desired to observe towards the Marshal. It was couched on broad principles ; no search or proceedings were ordered ; the publishers' whereabouts were not mentioned, the police seized no part of the edition. It even appears, surprising though it may be, that this decree was kept secret, and that Vauban was not aware of it. February came to an end and March began, and Vauban, without haste or concern, continued to have his sheets stitched and bound. He gave the first copies to his friends and relations, to Mesgrigney, his son-in-law, and to Boufflers, his old companion in arms.

This was, no doubt, what the other author was waiting for. Boisguillebert circulated his new edition of the *Détail de la France* without delay, with the addition of the pamphlet he had just written. He hoped that the Marshal's immunity would be extended to cover himself. But his hopes did not last for long. On March 14, there was again a Council, and new decrees were issued. The renewed publication forced the hand of the Ministers and compelled them to pronounce a double sentence. The decree issued against Vauban's book was rescinded, and a new one issued. Pontchartrain wrote it out with his own hand. "The said book," he wrote, "is still being circu-

lated in Paris . . . and has even been printed." And he concluded, "The King moreover requires that M. d'Argenson should report to him upon the matter."

The deposition of one Colas, a servant of Vauban's, which is preserved in the Record Office, informs us of the sequel. Vauban had two visitors staying with him, the Comtesse de Tavannes and Madame de Plélot, the wife of the second-in-command of the citadel of Lille, when the news of the decree was brought to him. The two ladies at once desired copies. Was this request complied with? I doubt it. Vauban had no desire to amuse the inquisitive, and the gravity of the situation was clear to him. Information had been laid, and the police set in motion. The old Marshal wished to be alone, and his visitors left him.

The widow Fétil still had forty copies left. Vauban sent Colas to fetch them. What was the object of this order? Obedience, or the desire to prevent their seizure? It must certainly have been his intention to obey, and he must have considered deeply. His King, the master he had loved so well for fifty years, had abandoned him. Had he then done wrong? Vauban's mind was too strictly disciplined, too loyal, too true, to allow him to evade the question. He questioned himself with the sorrow of a child punished for the first time. The facts of the case accused him; he

had acted secretly, and had adopted clandestine methods ; as a devoted subject and a soldier he had done wrong. But Vauban stood by the intentions of his act ; he examined them and still found them good. No disloyal idea had swayed him ; as a final act of a life of duty, he had meant to offer one service more. His ardour had swept him off his feet, no doubt ; but Vauban found in that ardour nothing that was not noble, no ambition, no bitterness, no desire to cause trouble or hurt. Colas tells the story of that evening. "During the whole time after dinner the Marshal seemed very distressed by the news that the chancellor had instituted a search for his book," he says. "In the evening, the fever seized him and he took to his bed, and was very ill on the following Friday and Saturday." Bronchitis attacked the distressed old man. His King had abandoned him, and persecuted him. Vauban's courage failed him, and his soul broke down. On Sunday morning the fever had subsided a little ; he took thought and was disturbed afresh. He was, as we know, not a devotee, but he was a Christian, like all good men of his time. His ideas were free but not proud, and he liked to receive advice. He desired that the theologians should give him their opinion. "On Sunday morning, the fever having abated," continues Colas, "the Marshal ordered me to take two of his books from his study, to take them to the abbé de Camps, in the Rue de Grenelle, Faubourg St. Germain, and to beg him to examine them and

give him his opinion." Colas obeyed immediately ; he took the key of the said study from the writing desk where the Marshal was in the habit of keeping it, took two of the books, closed the study, put the key back in its place, and took the books to the said Sieur de Camps, who received them with his own hands ; the abbé promised him to look into them and communicate with the Marshal.

On the same day, or perhaps the next, the Marshal received his confessor, a Jacobin whose name Colas does not mention, and to him as to the other abbé, he gave his book, doubtless the greatest sin of his life. He begged him " to read and tell him whether in writing it he had done anything against his conscience."

Meanwhile his condition became serious, and his last hours approached. Vauban felt the shadow of death ; his distress increased, and he desired a third opinion. He had a copy of the *Dixme* taken to Father Labat, a Jacobin of the same priory in the Rue St. Honoré in which Vauban's confessor lived.

What was the judgment of these clerics ? We may be allowed to believe that not only did they absolve Vauban, but that they applauded him. There were then a number of Bishops and preachers who, like Fénelon and Massillon, concerned themselves with the welfare of the people and dared to speak to the King of their distress. The tradition of St. Vincent de Paul was by no means extinct in

the Church of France. Did Vauban receive the consolation he desired? We can only hope so. "On Wednesday, March 30," says Colas, "at a quarter to two in the morning, the Marshal died."

The King was not ignorant of his servant's illness. On Monday, the 28th, during dinner, he was warned that M. de Vauban was in extremis and begged that M. Boudin, the principal medical attendant of Monseigneur, might be sent to him. "The King ordered him to go at once," wrote Dangeau, "and spoke of M. de Vauban with much esteem and friendship; he praised him on many scores and said, 'I lose a man very devoted to myself and to the state.'" If one recalls the great reserve with which Louis XIV made a habit of meeting his sorrows, the impassiveness which he deemed it his duty to assume, the Royal eulogy must be considered all that it should have been.

Scarcely had the news reached Versailles when the King began to receive petitions for the vacant posts. "They were sought on the very morning of March 30," writes the Marquis de Sourches in his journal, "and in the evening they were allotted by the arm-chair of Madame de Maintenon: Labadie was given the Governorship of Lille, and des Alleurs the Grand Priory of the Order of St. Louis."

Paris (or what was called Paris in those days, a few *salons* and cliques), showed greater emotion.

The Académie des Sciences ordered a mass to be said for the repose of the soul of the learned soldier which it had received as a member. "Ninety men of letters assisted at it," we are told. A curious piece of information which shows us this intellectual body, then still in its infancy, but destined to be so great in the near future. Here we have it mentioned almost for the first time, when it assembled to render homage to Vauban. On May 5, Fontenelle pronounced his eulogy; one of the smaller masterpieces of our academic literature. Read during the whole of the eighteenth century, it fixed and imprinted upon the French imagination the figure of Vauban, with his strength, kindness, and simplicity. Upon these Fontenelle grafted with deft fingers a "sensibility" which was then beginning to be fashionable.

"Never have the traces of Man's Pure Nature been better marked than in him, or with greater freedom from outside admixture. A direct and yet comprehensive intellect, which was attached to Truth by a kind of sympathy, and felt falseness without observing it, spared him the long detours that others follow; his nature was like a happy instinct, so prompt that it forestalled argument. He despised that superficial politeness, which pleases the world and which often hides so much harshness, but his kindness, his humanity, his liberality made for him another and rarer politeness, which was entirely of his heart."

It is difficult for us to-day to appreciate these

words. We are disposed to see in them the first of those harangues in which the academicians of the nineteenth century carried to such lengths the art of conveying severe truths in guarded language, of saying everything to absolute power which presumed to allow nothing to be said ; but perhaps we are mistaken, and the audience of 1706 may not have thought to seek for the inner meanings which we expect to-day.

The memory of the dead affects the living as an obscure incitement, as an obsession, and sometimes as remorse. An intangible reality is there, the shadow and reflection of departed souls. Those mighty dead ! What would they have said which we know not how to say, what would they have done ?

One who has long dwelt by Vauban's side, as his biographer, and his reader, when he sees the opening of those tragic years upon whose threshold he died, cannot fail to ask this of the great man who had gone. That hard world from which he had departed remained full of his works and his friendships, inspired by his ideas ; this suffering country was still his native land. What would he have said, what would he have done ?

In 1706 the Flanders frontier gave way, and Prince Eugène threatened Lille. In these decadent years, the old men were the best and the most truly young. The aged Boufflers implored the King to be allowed to defend the city ; the King

consented and he threw himself into the place. (If Vauban, the builder and Governor of Lille, had been there, it would certainly have been he who would have implored and received the honour.) Boufflers made a magnificent defence, and held out for four months, until the last crust of bread was eaten and his men were at their last gasp ; Vauban could have done no better. Vauban indeed was an invisible participant in the defence, for he had thought it out and planned it in a memorandum which Boufflers prized highly. If Lille fell, it was because the Army sent for its relief was paralysed in its movements by the indecision of its command, which had become imbecile. But had Vauban been shut up in Lille and called France to the rescue, would Vauban's appeal not have reawakened the vigour of France, which was not yet dead? Villars, free from all trammels and anxious to move, would have rushed to his assistance, and the relief of Lille would have taken the same place in French history as the relief of Denain. Denain was still four years ahead ; perhaps Vauban's great prestige would have altered history and hastened success.

Here is the proof, which cannot be gainsaid. Prince Eugène's cavalry penetrated as far as the Ile de France, and the Imperialists declared that they were about to push back the Frontiers of France as far as the Somme. The King held up his head once more, never had he appeared so grand and so simple ; if only Vauban had stood by his side, firm and faithful. He addressed himself to

the country, and from the pulpits the priests read his noble letter :

" As my love for the people is not less lively than that which I have for my own children, and as I share all the evils the war inflicts upon such faithful subjects, and have shown the whole of Europe that I desired only to bring them the blessings of peace, I am convinced that they will themselves refuse to obtain it upon conditions so contrary to justice and the honour of the French name. . . ."

It is just the attitude and language that Vauban would have loved. Louis XIV had found once more the tone and the spirit of his reign ; he had renewed its vigour.

Villars (55) commanded the army and won the battle of Denain. The English became weary and opened negotiations, the coalition was defeated and France was saved.

Vauban, however, was happy in not seeing this peace ! The English had sold it, and they fixed the price high. In order to keep Lille, Strasbourg and Besançon, Louis XIV sacrificed Dunkirk. In compliance with English demands, the place was dismantled and knocked down by the King's engineers. The skilfully constructed glacis, the sluices, the Rixban, the sea-ports, all these fine works disappeared for ever. Vauban loved them with the double love of the patriot and the creator ; he loved them, in his own words, " dearly." The acuteness of his anguish would have prevented him

from seeing what the peace saved ; on all its land frontiers, from Huningue which so valiantly opposed the progress of the invaders of 1815, to Lille which thrust them back in 1792, France remained within the enceinte which Vauban had built. This enceinte was his glory, and the glory of his period and his King. This period and this King have frequently been blamed for their delight in wars of magnificence and conquest. But conquest implies insecurity, whereas the seventeenth century stood for solidity. This period did not occupy itself, in Vauban's words, in "chasing butterflies" on the Italian plains or in foreign capitals. It concentrated its forces upon making secure the frontier of the East, from whence in all ages have come the misfortunes of the Gallic race. It established itself in Burgundy, in Franche-Comté, in Alsace, in Flanders and succeeded in attaching to itself the people it conquered. The weary work bore its fruits ; the Gaul of Vercingetorix and Cæsar, after fifteen centuries of dissension, regained its perfect form. Such was the work of the King and his servants, in the first rank of whom was Vauban his engineer. Between them they planned out and fortified France, and their work was so excellent that time has respected it. From Huningue to Dunkirk France still retains the lines of Vauban.

Is it generally known that he was one of the defenders of France in the late war ? As builder and Governor of Dunkirk, Vauban had designed his sluices to inundate the low lands of Nieuport

and Dixmude. His scheme was employed after the lapse of two centuries. The engineers of 1914 made use of the sluices built by the engineers of 1680, and the frontier was closed. In more than one spot the works of Vauban, built on the edge of the floods, were the targets of the German shells, and their venerable bricks and grassy slopes protected the soldiers of France.

Notes

CHAPTER ONE

Page 9.—(1) I have made great use of the *Oisivetés et Correspondance de Vauban*, two quarto volumes, edited by Colonel de Rochas, with notes and documents.

Among the writings dealing with Vauban, the earliest and most perfect is the Eloge of Fontenelle. The most complete is the first volume of the *Histoire du Corps imperial du Génie, des sièges et des travaux qu'il a dirigé depuis l'origine de la fortification jusqu'à nos jours*, by A. Allant, Paris, 1805. The author, an officer of the scientific corps, trained in his youth in the corps and the traditions of Vauban, has in this book written an excellent military and national history. The *Histoire de Vauban* by J. Roy (undated) in sexagesimo, is a good popular life, based on Allant's work, and on the whole superior to the *Histoire de Vauban* by Georges Michel. In collaboration with M. Andre Liesse, M. Georges Michel published an interesting study on *Vauban, economiste* (1871, octavo).

Page 9.—(2) Morvan is a hilly and wooded district of France, the centre of which lies about fifty miles west-south-west of Dijon. (*Tr.*)

Page 12.—(3) The *Arrière-Ban* was at this time somewhat similar to a second-line militia. The Ban consisted of the direct vassals of the King, the great feudal lords; the *Arrière-Ban* of the sub-vassals called up in their turn by their overlords. It is interesting to note that Vauban's patron, Louvois, the Minister of War, organized in 1688 a militia ballot to replace the *Arrière-Ban*. (*Tr.*)

Page 15.—(4) In 1643. Condé, then Duc d'Enghien, gained a great reputation by his victory over the Spanish infantry, till then considered invincible. He subsequently played a prominent part in the confused fighting of the Fronde, during the campaigns of which Vauban saw his first active service. (*Tr.*)

Page 18.—(5) "Up to 1480—that is to say, during the period of stone projectiles—fortified towns were surrounded by a con-

tinuous wall (generally without outworks). This wall was traced to suit the ground, and ordinarily had projecting walls at intervals.

"During the next period—that of smooth-bore ordnance and cast-iron projectiles, lasting from 1480 to 1859—the material earth was added to stone or masonry, as a better protection against the disintegrating effects of cast-iron shot; the bastioned trace was substituted for the old continuous wall, and the command was gradually reduced until escarps, from being twenty to thirty feet high, sank to a level with the glacis.

"A different system of defence was also evolved during this long period.

"During the previous period, i.e. from the earliest times up to 1480, complete reliance had been placed on a continuous enceinte.

"After 1480 as the range of guns gradually increased (owing to improvements in metallurgy and in the manufacture of powder), it was found necessary to supplement this defence by means of outworks pushed out gradually farther and farther until they reached to a considerable distance beyond the enceinte."—*Notes on Fortification.* Major B. R. Ward, R.E. London, John Murray, 1902. (*Tr.*)

Page 19.—(6) Pagan (1604–1665) published a work on fortification which achieved wide celebrity. (*Tr.*)

CHAPTER TWO

Page 22.—(7) In view of the fact that his relations with Louvois played so decisive a part in Vauban's career, it may not be out of place to give a short sketch of the career of the great War Minister, so dreaded throughout France and even Europe. The chief authority for his life is Camille Rousset's *Histoire de Louvois*, Paris, 1872.

Francois Michel le Tellier, Marquis de Louvois, was born in 1641. His father was the Chancellor le Tellier, who through his influence with Mazarin and the Court secured the reversion of the War Ministry for his son. In 1662 Louvois married Anne de Souvre, Marquise de Courtauvaux, a lady of ancient family and great wealth. His devotion to his duties and his warfare

against the abuses which had crept in during the previous reign and the regime of Marie de' Medici and Mazarin attracted the attention of Louis XIV, and he obtained considerable influence over the King. From 1666 until his death in 1691 he was sole Minister of War. The success of the campaigns of Turenne and Condé were largely due to his powers of organization. He entirely reformed the French army, and made of it the most formidable fighting machine in the world. At the same time—largely influenced, we may believe, by Vauban—he instituted schools and hospitals for officers and homes for their old age. He was responsible for the building of the Invalides, which was begun in 1671, and for many other great buildings in the neighbourhood of Paris. His feud with Colbert was greatly embittered by his propensity for inducing the King to spend sums of money on his own projects which Colbert had designed for other uses.

His arrogance and determination to achieve his own ends, even at the cost of riding roughshod over all who opposed him, made him exceedingly unpopular, and his contemporaries attributed to his influence the disastrous actions of the reign, such as the Revocation of the Edict of Nantes and the *dragonnades* which followed it. His harsh measures eventually caused him to fall out with Madame de Maintenon, whose rise to power he had probably aided, and through her with the King, who became jealous at the suggestion that he was merely the instrument of his omnipotent Minister. His death was directly attributable to a quarrel with his master, in which both lost their tempers. The excitement engendered overpowered him, and he died next day, July 16, 1691.

He was a man of great talents, possibly the greatest administrator the French army has ever known. His nature has always been represented as savage and overbearing, and consequently the usually cordial character of his relations with Vauban, as revealed by their correspondence, is very interesting. (*Tr.*)

Page 22.—(8) This canal is usually known as the *Canal de Languedoc*, or *du Midi*. It was designed by Baron Paul Riquet de Bonrepos and completed in 1681. It is 148 miles long, and rises 620 feet above sea-level, with 119 locks. The name *Canal des Deux Mers* is an allusion to the fact that it joins the Atlantic

and the Mediterranean, running from Toulouse on the Garonne to Cette. Ever since its construction projects for enlarging it to the dimensions of a ship-canal have been mooted. (*Tr.*)

Page 27.—(9) The previous history of Dunkirk is interesting. It was founded as a village in the seventh century, and fortified by Baldwin III of Flanders. With the rest of that province it fell eventually to Spain, from whom it was taken by Turenne at the Battle of the Dunes. It was, however, ceded to England, and subsequently sold by Charles II to Louis XIV. Pepys remarks on October 20, 1662: "Dunkirke, I am confirmed, is absolutely sold; for which I am very sorry." A month later he tells us that the money received was "400,000 pistolles," and that it "did weigh 120,000 weight." He expresses a pious hope that some of it may be available to pay the Navy with. (*Tr.*)

Page 40.—(10) After the occupation of Franche-Comté by Condé, a treaty had been signed at Aix-la-Chapelle in May, 1668. (*Tr.*)

Page 52.—(11) By the Treaty of Nijmwegen Spain ceded to France Franche-Comté, Dunkirk, and the western provinces of Flanders. (*Tr.*)

CHAPTER THREE

Page 55.—(12) This system, first introduced by Vauban, has been largely adopted in harbours subject to silting. (*Tr.*)

Page 70.—(13) François de Créqui, Marquis de Marines, came of a famous fighting family of the higher nobility. He was born in 1625, and became a Lieutenant-General before he was thirty. He was made Marshal in 1668, but soon after retired rather than serve under Turenne, who had been appointed Chief Marshal. He was a brilliant soldier, but the loss of Trier cast a cloud over his career and resulted in his captivity. He died in 1687. (*Tr.*)

Page 72.—(14) Jean Baptiste d'Eblé, a French officer of the scientific corps, who achieved a considerable reputation under Pichegru and Jourdain, becoming a Brigadier-General in 1793. He fought under Moreau, when he again distinguished himself, particularly in the defence of Kehl. Subsequently he served under Napoleon, who formed a high opinion of his abilities. During

the retreat from Moscow, the efforts of his bridging train in the face of tremendous difficulties were instrumental in saving the remnants of the French army. He died at Konigsberg immediately afterwards, worn out by his labours. (*Tr.*)

Page 76.—(15) The Truce of Ratisbon (1684) followed the capture of Luxemburg. (*Tr.*)

Page 83.—(16) This amazing letter of Louvois is indeed well worth study. He appears to have added the pressure in the ascending leg of the syphon to that in the descending leg in order to reach his figure of 1,088,640 lb. The true pressure at the bottom of the syphon would have been 13,110 lb. to the square foot, or not quite 100 lb. to the square inch. Allowing for the fact that his masonry would have had practically no tensile strength, and would therefore have had to rely upon its weight to resist this pressure, as he suggests, its walls would have had to have been, following his argument, at least sixty-five feet thick at the bottom of the valley, though of course they could have been diminished in thickness as they rose up the sides of the valley. It seems inconceivable that Vauban could have originally suggested a masonry conduit of this type. The syphon could no doubt have been built with iron pipes, even in those days, but the joints would have probably given trouble. (*Tr.*)

Page 89.—(17) The Edict of Nantes had been issued by Henri IV in 1598. It secured certain rights and privileges for the Huguenots, and was practically forced upon the Catholic party by the growing strength of the Protestants, who held many fortresses in the south and west of France. It was never popular in the rest of the kingdom, especially in Paris, and Louis XIV was certain of a great measure of public support when he revoked it in 1685. (*Tr.*)

Page 95.—(18) Could Vauban's memorandum have had any reference to the most carefully guarded political secret of the day, which in itself is a mystery never satisfactorily solved? This is no place for a discussion upon the difficulties surrounding the identity of the famous "Man in the Iron Mask"; the best exposition in English of the problem is contained in Mr. Andrew Lang's *The Valet's Tragedy*. If we accept his theory that Eustache Dauger was the victim, there are two or three suggestions which

make it just possible that Vauban had concerned himself with the forbidden secret.

In the first place, it was well known that Louvois was the author of the various orders issued to de St. Mars on the subject of the prisoner. Again, in July, 1669, Dauger was arrested at Dunkirk by order of Louvois. It is more than probable that Vauban, who if not actually in the city at that date, was at all events in the neighbourhood (see the *Epitome*, quoted on page 28), was aware of this arrest. Is it not just possible that Vauban, whose duties took him into all the fortresses used as prisons, may not have discovered in some way the identity of the victim, and with his usual impulsive compassion, and in ignorance of the nature of his mysterious offence, have written to Louvois urging some relaxation of the harshness observed towards him? Such an action would certainly have been in accordance with Vauban's character. (*Tr.*)

Page 98.—(19) The Cévennes were the scene of the principal Huguenot resistance after the Revocation. Their bands, called *Camisards*, from *camisade* (a night attack), under their famous leader Cavalier, later (1703 to 1711) maintained a regular war against the Royal armies, among which was the Irish Brigade of Berwick, already employed previously in the extermination of heretics. (*Tr.*)

Page 98.—(20) Memorandum on events from 1678 to 1693, quoted by C. Rousset, in his *Histoire de Louvois*.

Page 103.—(21) (1) The importance which economists then attached to the monetary wealth of nations is well known. (2) This sentence is incomplete, a common occurrence in the very careless writings of Vauban. "The loss of" or some similar words must be understood at the commencement.

Page 104.—(22) The Allies were now united in the "Grand Alliance," and consisted of the Emperor, Holland, England, Spain and Saxony. (*Tr.*)

Page 104.—(23) *Addition de* 1693. Rochas, Vol. II, page 485.

Page 106.—(24) Rochas, Vol II, page 488–489.

Page 108.—(25) Is familiar to many as British G.H.Q. during the latter half of the late war. (*Tr.*)

Page 110.—(26) Readers of Dumas' *Vicomte de Bragelonne* will

remember how great an honour this was in the reign of Louis XIV, and how well Porthos acquitted himself on a similar occasion. (*Tr.*)

Page 112.—(27) Colbert had died in 1683. (*Tr.*)

Page 120.—(28) *Memoire pour servir d'instruction dans la conduite des Siéges* (1699) quoted by Rochas, Vol. II, page 288.

Page 121.—(29) The snaphance, an early and imperfect form of flintlock, had been invented, probably at Nuremburg, about the middle of the sixteenth century, but it was not perfected until the beginning of the seventeenth century, and did not come into general use as a military weapon until a few years after the fate of Vauban's letter. The early form of bayonet was merely a dagger with a plug instead of a hilt, which plug fitted the muzzle of the musket and was inserted in it after firing. In 1690 the first ring-bayonet, in which for a plug was substituted a socket fitting outside the muzzle, thus allowing the musket to be fired while the bayonet was fixed, was exhibited to Louis XIV, who refused to adopt it. (*Tr.*)

Page 127.—(30) Jean Bart was the most popular French sailor of the age. He was born at Dunkirk in 1651, the son of a fisherman. His chief fame was gained in the Mediterranean, where he commanded a commerce-destroying privateer under letters of marque from the King. On one occasion he was taken prisoner by the English, but contrived to escape from Plymouth in a fishing-boat. Many stories, more or less apocryphal, are current about him in the French navy. One is to the effect that upon being summoned by Louis XIV to Versailles in order to have the command of a squadron conferred upon him, he thanked the King in the words: "Sire, you have done well!" On another occasion, when commanding the vessel bearing the Prince de Conté to Elsinore, he was chased and nearly captured by the English. The Prince, in congratulating him upon their escape, expressed his satisfaction at not having been taken prisoner. "Monseigneur" replied Jean Bart, "you need have had no fear of such an event. My son was in the magazine ready to blow us up if anything untoward happened." (*Tr.*)

Page 128.—(31) In 1691, by Eugène of Savoy. (*Tr.*)

Page 130.—(32) The letter from Laubanie to the King after

the surrender of Landau is so fine a piece of writing that I have thought fit to reproduce it.

"I ask pardon of Your Majesty, Sire, for having loſt the town of Landau. I employed all the means at my disposal to keep it, but they were unavailing. I can assure Your Majeſty, as a moſt honourable man, that from the firſt day of the siege to the laſt, though blind and dangerously wounded, I did not cease to give the necessary orders in the attempt to hold it, but the weakness of the garrison and the shortage of warlike material did not permit me to hold out longer leſt it should be carried by ſtorm and we be taken prisoners. Several officers diſtinguished themselves during the siege and are worthy of Your Majeſty's favour. I mention their names to M. de Chamillart, and I beg you, Sire, to remember their services. I am going to-morrow to Strasbourg to take some reſt, and if I may I will go thence to Paris, to see whether Gandron cannot save my right eye, the left being already loſt. Nothing could afford me greater pleasure than to continue in Your Majeſty's service. If I am unfortunate enough to lose my sight, I shall continue my service by my prayers, and I shall ever be mindful of the favour Your Majesty has shown me."

Page 142.—(33) A treatise might be written upon the origin of modern inventions and the researches of the military engineers. Vauban was conſtantly being asked queſtions, was always inveſtigating, and his opinion was always founded upon the moſt scientific reasoning. "The rules of engineers are drawn from the heart of mathematics," he objeĉted to an indulger in fancies. "If they do not follow these rules they cannot succeed." Several formulæ employed for a long time were the result of his experience and that of his colleagues; those, for example, on the size of mine-craters or the pressure of earth. More than a century later Poncelet, the mathematician, himself an officer of the scientific corps, confirmed the theory discovered by the "admirable wisdom" of the Maréchal de Vauban.

Page 150.—(34) Le Play (1806–1882), a French engineer and economiſt, who spent many years of his life in collecting material and ſtatiſtics bearing upon the welfare of the people. Under Napoleon III he became one of the organizers of the Paris Exhibitions of 1855 and 1867. (*Tr.*)

Page 150.—(35) The similarity between the careers of Vauban and Coehoorn (as his name is more properly spelt) is interesting. Coehoorn was born in 1641 and died in 1704. He was known as "The Dutch Vauban," and like his greater prototype began his military life at the early age of sixteen. At the siege of Grave in 1673 he invented what was to all intents and purposes the forerunner of the trench-mortar, which weapon was called a "Coehorn" after him, and was largely employed under that name up to the latter part of the eighteenth century. He was the chief constructor of fortifications in the service of the Allies, and, as Vauban is frequently considered to have done, he evolved and perfected three systems of fortification, which he elucidated in his *New Method of Fortification* published at Leuwarden, his birthplace, in 1685.

Colonel Allant is perhaps slightly biassed by his natural patriotic leanings in his depreciation of Coehoorn's siege of Namur in 1695. It should be remembered that the supreme genius of Vauban had had two years in which to render the place impregnable. He had taken particular precautions against the risk of its capture by the very methods he had himself employed, and probably the method of massed artillery was the only one which promised success. (*Tr.*)

Page 152.—(36) Camille Rousset wishes to correct the date of this letter, and for 1696 to read 1697. It seems evident to him that it was written during the negotiations which led up to the Peace of Ryswick. But the peace made with the Duke of Savoy, and the outline of general negotiations which followed its conclusion, explain the rumours which disturbed Vauban. Besides, Vauban was in the neighbourhood of Paris, from whence the letter was written, in the summer of 1696. During the same period in 1697 he does not appear to have left Lille. Further, although, by a slip of the pen, it often happens that one writes the date of a previous year, to which one has been accustomed, it would be unusual to write the date of a coming year, a 7 instead of a 6. Such corrections should not be made except for established reasons, and I think it best to adhere to the date as Vauban wrote it.

Page 153.—(37) The Three Bishoprics are those of Metz,

Toul and Verdun. They were the first acquisitions of Louis XIV in his design to secure a strategic frontier for France. (*Tr.*)

Page 154.—(38) In 1559. It was particularly disgraceful in the eyes of Vauban, for by its terms Savoy was lost to France and so a most valuable strategic frontier abandoned. (*Tr.*)

Page 156.—(39) Op. cit. II, 169, note.

Page 157.—(40) This method of enfilading trenches had very great effect upon the development of siege warfare. Hitherto the parallels of approach and the lines of defence had been simple and more or less straight trenches. The solid shot fired from the mortars of the day had a high angle of descent, and buried themselves in the bottom of these trenches; their effect being limited to the actual spot upon which they fell. Vauban employed his mortars to give a low angle of descent and so caused the shot to bound along the whole length of the trench, enormously increasing the zone of its effect. This led to the necessity for digging trenches in zig-zag form, or the construction of traverses at intervals, a trace which trenches have preserved to the present day, though for a different reason.

So effective did ricochet fire prove, that it was adopted by field artillery when engaged beyond grape-shot range, and was so employed until the time of the invention of shell. (*Tr.*)

Page 160.—(41) This was the Treaty of Ryswick. The plenipotentiaries were William Bentinck, Earl of Portland, and Vauban's friend, Marshal Boufflers, who had been appointed by William III and Louis XIV respectively after several weeks of abortive negotiations between the Allies and France. By its terms Louis XIV agreed to recognize William as King of England, and undertook to abandon the cause of James II. (*Tr.*)

CHAPTER FIVE

Page 163.—(42) So much has been written of Vauban's systems of fortification that some qualification of this statement is necessary. Colonel L. C. Jackson in his admirable article on "Fortification" in the *Encyclopædia Britannica*, expresses the matter shortly and concisely. "Vauban's genius was essentially practical, and he was no believer in systems. He would say, 'one does not fortify by

systems, but by common sense.' Of new ideas in fortification he introduced practically none, but he improved and modified existing ideas with consummate skill in actual construction. His most original work was in the attack, which he reduced to a scientific method most certain in its results. It is therefore one of the ironies of fate that Vauban should be chiefly known to us by three so-called 'systems,' known as his 'first,' 'second' and 'third.'"

The science of fortification, until the introduction of heavy ordnance employing high-explosive shell rendered permanent works almost obsolete, was however based very largely upon these three systems. The first system is typified by a single parapet and small ravelins. Even in this system Vauban's appreciation of the danger of ricochet fire in enfilade is apparent in the employment of traverses in the covered way. The second system is of the tower-bastion type employed at Landau. The third system is that of Brisach, in which the main bastions are placed well in advance of the enceinte.

Colonel Jackson's article, quoted above, deals also with the methods of siege-craft introduced by Vauban, and is illustrated with diagrams from his *Attack and Defence of Places*. (*Tr.*)

Page 167.—(43) Fénelon(1651–1715), was for many years tutor to the Duke of Burgundy. He seems to have acquired the mysticism, which was eventually to become the subject of Papal condemnation, from the writings of Madame Guyon. Fénelon was unfortunate in his relations with Louis XIV. Shortly after the Revocation he received a commission from the King to convert the Huguenots of Poitou, and had the temerity to stipulate that no dragoons should accompany him. Later both the *Maximes des Saintes* and Télémaque proved distasteful to Louis XIV; it was even alleged that the latter contained satirical passages aimed at the King. Fénelon did not hesitate to write to the King in the most outspoken terms: "In the midst of peace you have been engaged in war and have made wonderful conquests; you have established a Chamber of Reunion which is to be at one and the same time judge and party. This is adding insult and derision to usurpation and outrage."

The natural result was that the entourage of the Duke of Burgundy, under the influence rather than the leadership of Fénelon,

became a sort of "opposition," in the parliamentary sense, and encouraged the growing spirit of the eighteenth century against the absolutism of the seventeenth.

In an edition of his *Lettres sur Divers Sujets concernant la Religion et la Metaphysique* published in 1718, Fénelon is described as "Feu Messire François de Salignac de la Motte Fénelon, Precepteur de Messeigneurs les Enfans de France, & depuis Archéveque Duc de Cambray, Prince du Saint Empire &c." (*Tr.*)

Page 174.—(44) The Marquis de Torcy was at this time Foreign Minister. (*Tr.*)

Page 175.—(45) Boisguillebert (1676–1714) published his *Détail de la France* in 1695. His contention appears to have been much the same as that of Vauban, namely that for the many and complicated imposts, from the operation of which so many were exempt, collected through the agency of the revenue farmers, should be substituted a single tithe, or practically a ten per cent. income tax, collected directly by the agents of the King and applicable to all alike. This suggestion was naturally not popular with the "financiers" and owing to their opposition it was rejected. The principal innovation proposed by Vauban in his *Dixme Royale* was that the tithe should be paid in kind. (*Tr.*)

Page 176.—(46) Basville is best remembered as the savage enemy of the *Camisards* of Languedoc. (*Tr.*)

CHAPTER SIX

Page 186—(47) Tallard (1652–1728) was typical of the second-rate Marshals of the latter part of the reign. In his earlier service under Condé and Turenne he had distinguished himself, but, although he won a victory over the Elector of Hesse at Speyer in 1703, the year that he was appointed Marshal, it soon became evident that his talents were more those of a subordinate than of a commander. He was defeated by Marlborough at Blenheim in 1704, and remained a prisoner in England for seven years. On his return to France he was created Duc d'Hostun, and in 1726 was nominated a Secretary of State. (*Tr.*)

Page 189.—(48) Analysis given by the catalogue of autograph

letters belonging to the collection of M. de Monmerqué. Paris, 1884.

Page 200.—(49) Madame de Tencin's chief claim to fame is her establishment of a political and literary *salon*, very famous in its day, and not without its more doubtful side. The lady herself suffered a term of imprisonment in the Chatelet in connection with the suicide in her house of M. de la Fresnaye. She possessed a certain merit as a novelist, and her works at one time achieved a considerable reputation. Among English habitués of her salon were Chesterfield and Bolingbroke. (*Tr.*)

Page 200.—(50) d'Alembert's father was the Chevalier Destauches. He is chiefly remembered as a mathematician. (*Tr.*)

Page 200.—(51) Her letters were edited by Voltaire. Mr. Edmund Gosse, in his *French Profiles*, deals with her romantic story, which appealed very forcibly to the imagination of the time. (*Tr.*)

Page 206.—(52) (1) Watergang, properly irrigation canal. (2) This collection is now housed in the roof of the Invalides. It has never been discontinued, and contains admirable relief plans of the front at the time of the late war.

Page 210.—(53) *Archives de Lille*, quoted by Santai, *L'œuvre de Vauban a Lille*, Paris, 1911, page 63. It is also to the researches of M. Santai that we owe the letter of Vauban to the Count de Torcy quoted above. Vauban's letters will still be discovered for a long time to come.

Page 220.—(54) The principal taxes imposed on the people at this time were the *taille*, the *aides* and the *gabelle*. The *taille* was a tax levied nominally upon property. The King determined from time to time the amount that the *taille* was to bring in, and signed a *brevet de taille* accordingly. The revenue farmers then arranged the contributions payable by the individual; a system which lent itself to every sort of abuse. The *aides* were to all intents and purposes supplementary taxes collected upon the same principle as the *taille*. The *gabelle* was a salt tax. Salt was a monopoly; all salt produced in or imported into France was delivered to the *greniers de sel*, from which it was sold at a greatly enhanced price. Further, every citizen over the age of eight was compelled to buy a certain fixed weekly minimum of salt.

From all these taxes there were a large number of people, mainly of the official and noble classes, who were exempt. Boisguillebert and Vauban wished to substitute for this complex and oppressive system an income tax from which there should be no exemption, and which should be collected directly by the agents of the King without the intervention of the revenue farmers. Some attempt to carry out these ideas, without, however, abolishing the revenue farmers, was made by Orry during the administration of Cardinal Fleury in the second quarter of the eighteenth century. The *dixième*, which had already more than once been tentatively applied (though in addition to the older taxes), was revived as the sole source of revenue and imposed upon all incomes except those of the clergy. (*Tr.*)

Page 239.—(55) Villars, by a very fine exercise of strategy, defeated Prince Eugène at Denain on July 24, 1712, and so paved the way for the Treaty of Utrecht. (*Tr.*)